

the major arterials that serve the City. Interstate I-210 and I-605 freeways also generate noise. All of these noise sources are located beyond the City limits. The highest ambient noise level impacting the community is generated by traffic using Royal Oaks Drive, which is located in the City of Duarte. However, Royal Oaks noise levels do not exceed Bradbury City noise standards.<sup>84</sup>

Because the City of Bradbury will remain exclusively single-family residential, the 2012-2030 General Plan Update is not expected to result in increased local traffic. Any increases in traffic volumes along major roadways is expected to be generated by development located outside the City and impacts resulting from traffic are **less than significant**. The following goals, objectives and policies further ensure that potential noise impacts remain less than significant.

Noise Goal 1 – Reduce noise impacts from transportation sources.

Noise Goal 2 – Develop measures to address non-transportation noise impacts such as those that are generated from surrounding commercial and recreational activities (racetracks, etc.).

Noise Goal 3 – Establish land uses which are compatible with existing noise levels within the community.

Noise Goal 4 – Prevent and mitigate the adverse impacts of noise on City residents.

Noise Objective 1 – Maintain and reduce where feasible background noise levels emanating from citywide transportation sources.

Noise Objective 2 – Identify and mitigate construction activity and other sources of noise that may impact the community.

Noise Objective 3 – Careful consideration of noise impacts should be part of all land use decisions.

Noise Objective 4 – Maintain the quiet residential character of the City free from excessive noise from mobile and fixed source generators both citywide and region-wide.

Noise Policy 1 – Ensure noise mitigation measures are included in the design of new developments.

Noise Policy 2 – Encourage the State Department of Transportation (Caltrans) to continue programs that lead to the reduction of noise levels on the Interstate I-210 and I-605 freeways.

Noise Policy 3 – Continue the City's street improvement program to help reduce noise levels.

Noise Policy 4 – Encourage the use of acoustical materials in all new residential developments.

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<sup>84</sup>City of Bradbury Existing and Future Noise Contours, January 2014

Noise Policy 5 – Limit delivery, and truck traffic to designated routes.

Noise Policy 6 – Ensure residential developments are designed and mitigated achieve a maximum exterior CNEL of 65 dB and a maximum interior CNEL of 45 dB.

Noise Policy 7 – Encourage, support, and enforce all State and Federal legislation designed to abate and control noise pollution.

Noise Policy 8 – Encourage the use of rubberized asphalt for resurfacing streets.

Noise Policy 9 – Continuously review the Noise Ordinance to ensure noise-generating uses are adequately addressed.

Noise Policy 10 – Strive to resolve existing and potential conflicts between noise-generating uses and human activities.

Noise Policy 11 – Prohibit significant noise-generating activities on land located near sensitive noise receptors.

Noise Policy 12 – Evaluate the noise impacts generated by existing and future projects located in surrounding communities that impact or may impact the Bradbury ambient noise level.

Noise Policy 13 – Enforce limits set by the State to control noise levels, particularly those governing motor vehicles.

Noise Policy 14 – Ensure that construction noise does not cause an adverse impact to the residents of the City.

**(b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?**

The 1994 General Plan EIR's major goal of the Noise Element was to prevent the creation of noise problems in the City and the mitigation of existing noise sources. Policies and programs in the Noise Element served to reduce noise impacts due to future development in the planning area. Implementation of these programs would mitigate noise impacts to a level of insignificance.<sup>85</sup>

The City of Bradbury is subject to ground-borne vibration and noise levels associated with traffic from nearby major roadways and freeways and from construction activities. The 2012-2030 General Plan Update does not propose any new development which would result in ground borne vibration or noise levels beyond those levels accounted for in the existing General Plan. Implementation of the goals, objectives and policies stated in XII (a) as they relate to ground borne vibration and noise would ensure impacts related to this issue area are ***less than significant***.

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<sup>85</sup> City of Bradbury 1994 General Plan Environmental Impact Report, p. 3-53.

**(c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

The 1994 General Plan EIR's major goal of the Noise Element was to prevent the creation of noise problems in the City and the mitigation of existing noise sources. Policies and programs in the Noise Element served to reduce noise impacts due to future development in the planning area. Implementation of these policies and programs will ensure that noise impacts remain **insignificant**.<sup>86</sup>

The City of Bradbury will continue to remain exclusively single-family residential under the 2012-2030 General Plan Update.<sup>87</sup> This land use is not expected to result in any significant increases in local traffic, which, as explained in XII (a), is the primary source of noise in the City. Thus, future development under the 2012-2030 General Plan Update and implementation of the goals, objectives and policies stated above in response XII (a) will ensure **less than significant impacts** in regards to ambient noise levels.

**(d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

The 1994 General Plan EIR's major goal of the Noise Element was to prevent the creation of noise problems in the City and the mitigation of existing noise sources. Policies and programs in the Noise Element served to reduce noise impacts due to future development in the planning area. Implementation of these policies and programs will ensure that noise impacts remain insignificant.<sup>88</sup>

The City of Bradbury's Municipal Code limits the duration and magnitude of noise levels. The 2012-2030 General Plan Update does not propose any new development beyond that anticipated in the 1994 General Plan and implementation of the General Plan would not expose residents to excessive noise levels. Therefore, with the goals, objectives and policies proposed in the 2012-2030 General Plan Update and listed above in response XII (a) noise impacts are **less than significant**.

**(e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

The 1994 General Plan EIR did not address this issue area. The City of Bradbury is not located within the immediate vicinity of any commercial airport nor does any area of the City fall within an airport land use plan. Therefore, there are **no impacts** resulting from public airports.

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<sup>86</sup> City of Bradbury 1994 General Plan Environmental Impact Report, p. 3-53.

<sup>87</sup> City of Bradbury General Plan Update 2012-2030, Health and Safety Element, p. 6-7.

<sup>88</sup> City of Bradbury 1994 General Plan Environmental Impact Report, p. 3-53.

**(f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?**

Refer to response XII (e) Therefore, there are **no impacts** resulting from public airports.

**XIII. POPULATION AND HOUSING: Would the project:**

**(a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

The 1994 General Plan EIR stated that the Housing Element's policies and programs were designed to accommodate the housing demand in the City and region. Adverse impacts on population and housing due to future development would be mitigated by policies and programs in the Land Use and Housing Elements. No adverse impacts were associated with the adoption of the 1994 General Plan in terms of housing and population.<sup>89</sup>

The City of Bradbury is one of the ten smallest cities in Los Angeles County, with 1,048 residents in 2010.<sup>90</sup> The 2012-2030 General Plan Update does not include any changes to currently permitted uses and densities in the City. The 1994 General Plan projected Bradbury's population to be 1,500 and approximately 501 residential units at full build-out. The General Plan Update projects a population of approximately 1,541 and 497 units.

Implementation of the 2012-2030 General Plan Update, existing 2008 Housing Element<sup>91</sup> policies and programs as well the following goal, objective and policy of the Land Use Element would ensure impacts related to this issue area are **less than significant**.

Land Use Goal 1 -The Land Use Element maintains the existing rural residential character of the City. The element designates the general location, distribution, and extent of existing and permitted development.

Land Use Objective 1 - To maintain the existing character of the community and to preserve those environmental resources and amenities that make the City of Bradbury a desirable place to live.

Land Use Policy 1 - The residential character of the community and environmental resources important to the City will be maintained.

**(b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

The 1994 General Plan EIR stated that the Housing Element's policies and programs were designed to accommodate the housing demand in the City and region. Adverse impacts on

<sup>89</sup> City of Bradbury 1994 General Plan Environmental Impact Report, p. 3-14.

<sup>90</sup> 2012-2030 City of Bradbury General Plan Update, Introduction, p. 5.

<sup>91</sup> The City of Bradbury is currently updating its Housing Element.

population and housing due to future development would be mitigated by policies and programs in the Land Use and Housing Elements. No adverse impacts were associated with the adoption of the 1994 General Plan in terms of housing and population.<sup>92</sup>

The 2012-2030 General Plan Update does not include any changes to currently permitted uses and densities in the City. Implementation of the 2012-2030 General Plan Update and existing 2008 Housing Element would not require demolition of existing housing, necessitating the construction of replacement housing elsewhere. Additionally, the Land Use goal, objective, and policy stated above in response XIII (a) would ensure that there are **no impacts** in regards to this issue area.

**(c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

The 1994 General Plan EIR stated that the Housing Element's policies and programs were designed to accommodate the housing demand in the City and region. Adverse impacts on population and housing due to future development would be mitigated by policies and programs in the Land Use and Housing Elements. No adverse impacts were associated with the adoption of the 1994 General Plan in terms of housing and population.<sup>93</sup>

The 2012-2030 General Plan Update does not include any changes to currently permitted uses and densities in the City. Implementation of the 2012-2030 General Plan Update and existing 2008 Housing Element would not require demolition of existing housing, necessitating the construction of replacement housing elsewhere. Additionally, the Land Use goal, objective, and policy stated above in response XIII (a) would ensure that there are **no impacts** in regards to this issue area.

#### XIV. PUBLIC SERVICES:

**(a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:**

##### **Fire protection**

The 1994 General Plan EIR stated that impacts of new development on public services would be reduced by regular evaluation of public service needs. The Safety Element contained standards and plans that would be effective in reducing potential adverse impacts in regards to public services.<sup>94</sup>

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<sup>92</sup> City of Bradbury 1994 General Plan Environmental Impact Report, p. 3-14.

<sup>93</sup> City of Bradbury 1994 General Plan Environmental Impact Report, p. 3-14.

<sup>94</sup> City of Bradbury 1994 General Plan Environmental Impact Report, p. 3-55.

The Los Angeles County Fire Department provides fire protection services to the City of Bradbury.<sup>95</sup> Station 44 in Duarte provides equipment and manpower for fire incidents. Back-up paramedic assistance is provided by Station 29 in Baldwin Park and Station 32 in Azusa. The Monrovia Fire Department offers additional back-up service when necessary.

The City of Bradbury is located within a Very High Fire Hazard Severity Zone as designated by the County of Los Angeles Fire Department.<sup>96</sup> The entire City lies within a Local Responsibility Area, an area managed by local fire departments. Public Resource Code section 4291 requires that homeowners provide fuel modification to 100 feet (or to the property line) around their buildings to create a defensible space for firefighters and to protect their homes from wildfires. Residents must reduce dry fuel around the perimeter of any structure and comply with the recently adopted building codes that provide standards for mitigating fire hazards.

Any new development would be required to comply with all applicable federal, state and local regulations governing the provision of fire protection services, including adequate fire access and number of hydrants. The California Fire Code includes provisions addressing construction standards for new structures and remodels, road widths and configurations designed to accommodate the passage of fire trucks and engines, and requirements for minimum fire flow rates for water mains.

With the implementation of the following proposed goals, objectives and policies in the 2012-2030 General Plan Update, there are ***no impacts*** as they relate related to fire protection.

Safety Goal 3: To achieve a greater sense of citizen satisfaction with the safety services within the community, through constantly monitoring the effective and efficient staffing of safety service personnel.

Safety Goal 8: Assure that existing and new development addresses fire protection in a proactive and preventative way.

Safety Objective 3: Communicate with Bradbury residents through all available media, that safety personnel are properly trained to provide assistance in the event of a disaster.

Safety Objective 7: Ensure that adequate service levels of fire protection are maintained in the City.

Safety Policy 2: Implement precautionary measures in high risk areas to reduce injury and loss of property caused by natural or manmade hazards.

Safety Policy 4: Provide adequate levels of service to ensure that the residents are protected to the best of the City's ability from natural and manmade disasters.

Safety Policy 6: Establish and maintain a variety of media sources to enable interactive safety awareness and preparedness educational opportunities for the residents.

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<sup>95</sup> 2012-2030 City of Bradbury General Plan Update, Health and Safety Element, p. 26.

<sup>96</sup> 2012-2030 City of Bradbury General Plan Update, Health and Safety Element, p. 16.

Safety Policy 8: Provide opportunities to continually advise and update community residents regarding actions and activities they should engage in after a significant natural or manmade disaster.

Safety Policy 9: Support continuing review and updating of the City's Disaster Preparedness Program manual.

Safety Policy 11: Maintain and evaluate the level of safety services available to the community.

Safety Policy 13: Continue to support "mutual assistance" agreements between local and State fire fighting agencies.

Safety Policy 14: Continue to support programs to reduce fire hazards within the community.

Safety Policy 15: Provide appropriate fire-fighting equipment, personnel and peakload water supply.

Safety Policy 16: Provide access to potable water for emergency purposes.

Safety Policy 18: Require all existing and new development to install and maintain adequate smoke detection systems.

Safety Policy 19: All new development to install fire sprinkler systems

### **Police protection**

The 1994 General Plan EIR stated that impacts of new development on public services would be reduced by regular evaluation of public service needs. The Safety Element contained standards and plans that would be effective in reducing potential adverse impacts in regards to public services.<sup>97</sup>

There are 88 cities within Los Angeles County. The City of Bradbury is one of 42 cities within the County that contracts with the County of Los Angeles for law enforcement services. The Los Angeles County Sheriff's Department (LASD) provides police protection to the City of Bradbury.<sup>98</sup> In times of emergency, the Sheriff dedicates all available personnel and equipment to address the City's needs.

In 2013 there were 23 reported crimes in City of Bradbury.<sup>99</sup> The City's crime rate is one of the lowest in Los Angeles County, which may be attributed to the gated communities and individual properties equipped with gates and security. Additionally, the narrow and dead-end roads limit opportunities for undesirable activities.

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<sup>97</sup> City of Bradbury 1994 General Plan Environmental Impact Report, p. 3-55.

<sup>98</sup> 2012-2030 City of Bradbury General Plan Update, Health and Safety Element, p. 26.

<sup>99</sup> *City of Bradbury Crime Statistics*, December 2013, prepared by the Los Angeles County Sheriff.

With the 2012-2030 General Plan Update implementation of the proposed goals, objectives and policies stated in response XIV (a) as it relates to police protection, there are ***no impacts*** in regards to related to police protection.

## Schools

The 1994 General Plan EIR stated that impacts of new development on public services would be reduced by regular evaluation of public service needs. The payment of school impact fees was expected to reduce impacts on school services.<sup>100</sup>

The Duarte Unified School District provides elementary, junior high and high school services to the City of Bradbury. The District services Bradbury, Duarte, Monrovia, and portions of the unincorporated area of the County of Los Angeles. The District boasts five elementary schools, (Andres Duarte Elementary, Beardslee Elementary, Maxwell Elementary, Royal Oaks Elementary, and Valley View Elementary Schools), one intermediate school (Northview Intermediate), and one high school (Duarte High School).

Currently, there are 173 residents under the age of 18 that attend or potentially would attend schools within the Duarte Unified School District. The under 18 year-old population comprises 16.5 percent of the total population. Even under full build-out, the potential increase in the population would have a minimal impact on the School District.

Implementation of the 2012-2030 General Plan Update Land Use Element goal, objective and policy listed below ensures the conservation of existing patterns and intensities of use and therefore would not substantially alter the number of students in the school system. ***No impacts*** in regards to this issue area will occur.

Land Use Goal 1: The Land Use Element maintains the existing rural residential character of the City. The element designates the general location, distribution, and extent of existing and permitted development.

Land Use Objective 1: To maintain the existing character of the community and to preserve those environmental resources and amenities that make the City of Bradbury a desirable place to live.

Land Use Policy 1: The residential character of the community and environmental resources important to the City will be maintained.

## Parks

The 1994 General Plan EIR discussed issues related to parks under the Recreation heading. The EIR stated that the Open Space Element dealt with open space and recreation issues in the City. It was determined at that time that the community did not want to see new park development in the City. Additionally, the Land Use Plan which called for low density

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<sup>100</sup> City of Bradbury 1994 General Plan Environmental Impact Report, p. 3-55.

development would not create a need for additional parkland. No adverse impacts occurred regarding this issue area.<sup>101</sup>

Residents of the City of Bradbury enjoy private pools, tennis courts, basketball courts, and equestrian facilities within the community. The Royal Oaks Elementary School offers a play field for active recreation and organized ball games. The community interest in public recreation facilities is minimal and focuses primarily on open space preservation and trails as demonstrated by the general plan policies below. However, there is an abundance of public active and passive recreation within close proximity. Additionally, public facilities for active recreation such as organized sports (baseball, football, soccer, competitive swimming, golf, etc.) are readily available within adjacent communities. Input from the community indicates that residents are interested in trails.

With the implementation of the following 2012-2030 General Plan Update goals, objectives and policies as they relate to park land, there are ***no impacts***.

Open-Space Goal 1: Protect and enhance Bradbury's Open-Space.

Open-Space Goal 2: To develop sufficient open-space and recreational-trail access to meet the needs of the community residents.

Open-Space Goal 3: To provide open-space and recreational opportunities to the greatest extent possible.

Open-Space Objective 1: Make Open-Space resources available to existing and future residents.

Open-Space Policy 6: Preservation of historically or culturally significant sites.

Open-Space Policy 9: Promote development and management of public and private parks, trails and recreational areas.

### Other public facilities

The 1994 General Plan recognized that the impacts of new development on public facilities could be reduced through the regular evaluation of public service needs in the City and implementation of necessary adjustments to provide adequate services. In addition, policies recommending adoption of an emergency preparedness plan would further reduce impacts.

The County of Los Angeles offers library services at the Duarte Library, located at 1302 Buena Vista Street, in the City of Duarte. Additional nearby libraries are at Temple City Library, Live Oak Library and Norwood Library.

Emergency medical services are available throughout Los Angeles County. Hospitals near the City of Bradbury that provide acute care include the Methodist Hospital in Arcadia, Huntington

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<sup>101</sup> City of Bradbury 1994 General Plan Environmental Impact Report, p. 3-66.

Hospital in Pasadena, City of Hope National Medical Center in Duarte, Kaiser-Permanente Foundation Hospital in Baldwin Park, and Foothill Presbyterian Hospital in Glendora.

The General Plan Update does not substantively change land use or development intensity. With the implementation of the 2012-2030 General Plan Update goals, objectives and policies as stated above in response XIV (a) and their relation to public facilities, there are **no impacts**.

## XV. RECREATION:

**(a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

The 1994 General Plan EIR discussed issues related to parks under the Recreation heading. The EIR stated that the Open Space Element dealt with open space and recreation issues in the City. It was determined at that time that the community did not want to see new park development in the City. Additionally, the Land Use Plan which called for low density development which would not create a need for additional parkland. No adverse impacts occurred regarding this issue area.<sup>102</sup>

The continued increase in population as projected in the Land Use Element based on the full build-out potential of the existing General Plan could minimally increase demand for recreational services and facilities. However, continued build-out of the existing General Plan would also include the development of pedestrian/equestrian trails and other open spaces. With the implementation of the following Open-Space objective and policies as they relate to recreational uses there are **no impacts**.

Open-Space Objective 1: Make Open-Space resources available to existing and future residents.

Open-Space Policy 6: Preservation of historically or culturally significant sites.

Open-Space Policy 9: Promote development and management of public and private parks, trails and recreational areas.

**(b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?**

Refer to response XV (a). There are no impacts related to expansion or construction of new recreational facilities.

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<sup>102</sup> City of Bradbury 1994 General Plan Environmental Impact Report, p. 3-66.

## XVI. TRANSPORTATION/TRAFFIC: Would the project:

**(a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

The 1994 General Plan EIR did not address this issue area.

The City of Bradbury is comprised entirely of single-family residential detached dwelling units. There are no retail commercial, industrial or multi-family uses of land within the City. There are no signalized intersections and no arterial highways.<sup>103</sup> All public and private streets are designated as local or local-collector streets.

The 2012-2030 General Plan Update does not conflict with any other applicable plans, ordinances or policies. In fact, the General Plan Update provides the following goals, objectives and polies, which further the effectiveness and performance of the circulation system:<sup>104</sup>

Circulation-Transportation Goal 1: The Circulation-Transportation Element seeks to maintain safe and efficient circulation systems that do not impact the rural residential character of the City.

Circulation-Transportation Goal 2: Maintain transit programs that do not exceed the City's annual transit funding allocation or budget.

Circulation-Transportation Goal 3: Inform residents of all available transit programs.

Circulation-Transportation Goal 4: Support regional rail services such as the METRO Gold Line light rail system.

Circulation-Transportation Goal 5: Promote traffic safety throughout the community.

Circulation-Transportation Goal 6: Promote a "Dark Sky" development concept for all circulation systems that is consistent with the City's rural character.

Circulation-Transportation Objective 1: To accommodate existing traffic patterns and plan for future demand.

Circulation-Transportation Objective 2: Strive for the creation of new transportation facilities for motorists, equestrians, pedestrians, and bicyclists. Emphasize design standards that result in the construction of circulation and transportation systems that are safe and efficient; and sensitive to the needs of the disabled and City's unique rural residential character.

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<sup>103</sup> Traffic Impact Analysis, 2012-2030 City of Bradbury General Plan Update Circulation Element, p. 5.

<sup>104</sup> Traffic Impact Analysis, 2012-2030 City of Bradbury General Plan Update Circulation Element, p. 12-13.

Circulation-Transportation Policy 1: All public roadways and roadway improvements will be constructed to the City of Bradbury local street standards so as to preserve the rural residential character of the City.

Circulation-Transportation Policy 2: Continue inter-jurisdictional relationships with neighboring cities to coordinate the design and implementation of transportation systems.

Circulation-Transportation Policy 3: Explore all available funding sources and opportunities for improving transportation programs and facilities.

Circulation-Transportation Policy 4: Develop a public information/marketing campaign to advertise the availability of transit services to City residents.

Circulation-Transportation Policy 5: Continue to support and work with regional agencies to support the expansion of the Gold Line and other transportation programs and services for the San Gabriel Valley.

Circulation-Transportation Policy 6: Promote enforcement of speed laws and continue to monitor the use of City streets.

The 2012-2030 General Plan Update also includes an Action Program to carry out the above goals, objectives and policies.<sup>105</sup> Therefore, there are **no impacts** in regards to this issue area will occur.

**(b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?**

The 1994 General Plan EIR did not address this issue area.

The Level of Service (LOS) is a qualitative indicator that is used to describe the operative conditions of a roadway. The levels range from A to F, with LOS A being the best operating conditions and LOS F being the worst. A new Traffic Impact Analysis was prepared for the 2012-2030 General Plan Update. The Analysis found that all roadway segments currently operate at LOS A.<sup>106</sup>

The City of Bradbury is near build-out. However, approximately 97 additional residential units can be constructed in the undeveloped/underutilized parcels in the City. If all 97 residential units are constructed, approximately 923 trip-ends per day will be generated.<sup>107</sup> So, even if full build-out is achieved, roadways will continue to operate at LOS A.<sup>108</sup>

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<sup>105</sup> 2012-2030 City of Bradbury General Plan Update, Circulation Element, p. 13-14.

<sup>106</sup> Traffic Impact Analysis, 2012-2030 City of Bradbury General Plan Update, Circulation Element, p. 8.

<sup>107</sup> Traffic Impact Analysis, 2012-2030 City of Bradbury General Plan Update, Circulation Element, p. 9.

<sup>108</sup> Traffic Impact Analysis, 2012-2030 City of Bradbury General Plan Update, Circulation Element, p. 14.

The 2012-2013 General Plan Update therefore does not conflict with applicable congestion management programs. In addition the proposed goals, objectives and policies as stated in response XVI (a) will ensure there are ***no impacts*** in regards to this issue area.

**(c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**

The 1994 General Plan EIR recognized that the El Monte Airport located approximately 13 miles away would not be affected by adoption of the General Plan and found that there would be no impact on air traffic patterns.

As there are no airports in the City of Bradbury, implementation of the 2012-2030 General Plan Update does not interfere or alter air traffic patterns in or near the City of Bradbury. Therefore, ***no impacts*** will occur regarding this issue area.

**(d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

The 1994 General Plan EIR found that the limited development envisioned by the Land Use Element would not create changes in the circulation system that would result in unsafe conditions. No impact was identified.

Similarly, the 2012-2030 General Plan Update would not change transportation routes or traffic patterns which would increase hazards. Individual development in the northern hills will be required to provide an analysis of traffic and circulation, including design features. The 2012-2013 General Plan Update therefore does not conflict with applicable congestion management programs. In addition the proposed goals, objectives and policies as stated in response XVI (a) will ensure ***no impacts*** in regards to this issue area will occur.

**(e) Result in inadequate emergency access?**

The 1994 General Plan EIR recognized that future development envisioned under the plan might be required to provide infrastructure improvements within existing rights-of-way. Construction activities associated with these improvements could cause temporary detours which could affect emergency services. However, the impact, because of its temporary nature, was found to be less than significant.

The City of Bradbury adopted a Natural Hazard Mitigation Plan on April 19, 2007.<sup>109</sup> The Plan is evaluated annually to determine the effectiveness of its programs and to reflect changes in land development or programs. The 2012-2030 General Plan Update does not change transportation routes or traffic patterns, nor does it reduce emergency access. Any new development would be required to meet all applicable local and state regulatory standards for adequate emergency access and comply with applicable provisions of the Municipal Code and Fire Code. In addition

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<sup>109</sup> 2012-2030 City of Bradbury General Plan Update, Circulation Element, p. 8.

the proposed goals, objectives and policies as stated in response XVI (a) will ensure ***no impacts*** in regards to this issue area will occur.

**(f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?**

The 1994 General Plan EIR found that there would be no significant increase in vehicular traffic and therefore determined that there would be no impact on bicycle or pedestrian facilities. In addition, the 1994 General Plan EIR found that transit facilities would not be impacted by the proposed implementation of the 1994 General Plan.

The 2012-2030 General Plan Update does not include substantive changes in land use or allowable development envelopes. In addition the proposed goals, objectives and policies as stated in response XVI (a) will ensure ***no impacts*** in regards to this issue area will occur.

**XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:**

**(a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

Although relatively small number of residences has access to a public sewer system operated by the Los Angeles County Sewer Maintenance District, most of the City's 400 dwellings have private on-site septic systems. There is ample capacity in the existing public wastewater treatment system. However, most of the vacant sites do not have access to the public sewer system and will require on-site septic systems<sup>110</sup>

The 1994 General Plan anticipated that new development would be able to connect to the existing public sewer systems and included policies that discouraged septic tank use. The General Plan EIR found that there were no significant adverse impacts related to wastewater collection and treatment as all impacts could be mitigated to below a level of significance.

The 2012-2030 General Plan Update anticipates that most new homes will have their private, on-site septic systems. New septic systems will be regulated by the Los Angeles County Department of Environmental Health. Therefore, impacts as they relate to wastewater treatment requirements are ***less than significant impacts***.

**(b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

For a discussion of wastewater impacts see response to XVII (a). The impacts to wastewater are ***less than significant***.

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<sup>110</sup> 2012-2030 City of Bradbury General Plan Update, Community Resources Element, p. 27.

California America Water Company provides domestic and fire flow water to Bradbury residents and has ample capacity and infrastructure to meet existing demand and the slight increase in demand that will occur with future development.<sup>111</sup> In addition, a new well is proposed on Lemon Avenue.

The 1994 General Plan EIR found there were no adverse impacts to water service delivery as all impacts could be mitigated to below a level of significance. Water demand necessitated by development of the 2012-2030 General Plan Update remains the same as the previous plan. In addition the following policies are designed to conserve water and reduce demand:

Conservation Policy 1 – Protect water bodies, watersheds and courses from development impacts.

Conservation Policy 5 – Conserve water supplies (ground and surface).

With these policies in place, 2012-2030 General Plan Update will not require the construction or expansion of new water facilities; therefore, there is **no impact**.

**(c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

Storm water run-off in Bradbury flows along natural channels and canyons, roadways and the Bradbury Flood Control Channel.<sup>112</sup> The 1994 General Plan EIR anticipated that new development would provide new facilities and recognized that in some cases downstream facilities would need to be upgraded. However, the 1994 EIR found that the impacts could be mitigated to below a level of significance.

The 2012-2030 General Plan Update would not substantively change land use or the allowable development envelopes previously planned for under the existing General Plan. New development must contain run-off in on-site detention and retention basins. Potential impacts related to storm water run-off are considered **less than significant**.

**(d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

The California American Water Company obtains its water from numerous sources, including local groundwater, surface water and water imported from the Metropolitan Water District (MWD). As previously stated, a new well is proposed on Lemon Avenue. Any future development will require connection to existing water lines and will result in increased water consumption.

The 1994 General Plan EIR found that implementation of water conservation policies in the plan would reduce the impact to below a level of significance.

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<sup>111</sup> 2012-2030 City of Bradbury General Plan Update, Community Resources Element, p. 27.

<sup>112</sup> 1994 City of Bradbury General Plan Environmental Impact Report, p. 3-58.

The 2012-2030 General Plan Update would not substantively change land use or the allowable development envelopes previously planned for under the existing General Plan. The following general plan goals and objectives will further reduce any related impacts. As discussed in response XVII (b), California American Water Company can supply the City's existing and future water demands; therefore, the impact remains ***less than significant***.

Conservation Goal 4: Protect and maintain the local water supply to ensure that the City's growing demand for water is properly accommodated.

Conservation Policy 1: Protect water bodies, watersheds and courses from development impacts.

Conservation Policy 4: Support water purveyor in efforts to provide domestic and agricultural water.

Conservation Policy 5: Conserve water supplies (ground and surface).

**(e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

See response to XVII (a). Project impacts related to capacity of public sewer system operated by the Los Angeles County Sewer Maintenance remain ***less than significant***.

**(f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?**

The City of Bradbury is served by Burrtec Waste Industries, Inc., which hauls solid waste to the Puente Hills Material Recovery Facility (MRF). From there the refuse is delivered to the Orange County Landfill system. The Los Angeles County Sanitation District which oversees the Puente Hills MRF has a three-year contract with Orange County Sanitation District to accommodate solid waste disposal. The contract ends fall 2016.<sup>113</sup> Curbside Recyclables are delivered to the Allan Company; whereas Green Waste is delivered to the Burrtec West Valley Material Recovery Facility (MRF) located in Fontana. Farm animal manure is delivered to local nurseries.<sup>114</sup>

The 1994 General Plan recognized that new development permitted by the plan would generate additional solid waste. However, it determined that implementation of the goals, objectives and policies outlined in the general plan would reduce the impacts to less than significant.

Similarly, the 2012-2030 General Plan Update contains the following goals and objectives are designed to encourage recycling and reduce solid waste management impacts; therefore, this impact remains ***less than significant***.

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<sup>113</sup> Phone conversation on January 28, 2014 with Richard Nino, Director of Municipal Services, Burrtec Waste Industries.

<sup>114</sup> 2012-2030 City of Bradbury General Plan Update, Community Resources Element, p. 24-25.

Conservation Goal 1 – Maintain a healthy and clean city.

Conservation Goal 2 – Ensure adequate and cost effective trash collection for Bradbury residents.

Conservation Goal 6 – Prolong the life and safety of landfills and find an environmentally safe alternative means for the disposal of solid waste.

Conservation Objective 1 – Continue to improve the waste diversion and recycling programs already in place.

Conservation Objective 3 – When markets for new types of recyclables open up, the City should begin implementing new programs with the trash hauler.

**(g) Comply with federal, state, and local statutes and regulations related to solid waste?**

This impact was not addressed in the 1994 General Plan EIR.

State law requires a 50 percent diversion of solid waste from landfills. The City of Bradbury has achieved this diversion through recycling and collection of green waste, and has diverted at least 50 percent of its solid waste in compliance with state law.<sup>115</sup> The City remains committed to continue its existing waste reduction and minimization efforts as evidenced by the following goals and objectives listed in response XVII (f). Therefore, impacts in regards to this issue area are *less than significant*.

**XVIII. MANDATORY FINDINGS OF SIGNIFICANCE:**

**(a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

The City of Bradbury is largely built-out with single family residential community. Lots in the southern portions that border the City of Duarte are smaller than other areas of the Bradbury. Generally, the lot size increases as the approach the steep foothills of the Los Angeles Mountains. The northern hillsides that border the National Forest are designated Open Space, Private Owned Undeveloped. Development is limited in this area based on the Hillside Development Standards which limit development and protect biological resources and native habitat.

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<sup>115</sup> 2012-2030 City of Bradbury General Plan Update, Community Resources Element, pg. 25.

The 1994 General Plan established the Hillside Preservation Overlay and the Conservation Overlay to protect habitat and species in the northern hillside portions of the City. These overlay designations along with supporting land use and conservation policies were found to mitigate impacts on plants and animals to below a level of significance.

Under the 2013-2030 General Plan Update, the 302 acres in the northern hillside portions of the City will continue to be subject to the Hillside Development Standards that are set forth in the City's zoning ordinance. Additionally, the property remains in a resource management overlay as set forth in the Conservation Element. Additional development policies as set forth below further protect the environment. Any development in the 302 acres in the northern hillside area will require in-depth design and environmental study and mitigation. As a result, cumulative impacts on the biological habitat and the species that it supports are ***less than significant***.

Land Use Goal 1 – The Land Use Element maintains the existing rural residential character of the City. The element designates the general location, distribution, and extent of existing and permitted development.

Land Use Goal 2 – Preserve the identity, image and environmental quality of the hillside and open space areas in perpetuity by enforcing the Hillside Development Standards.

Land Use Objective 1 – To maintain the existing character of the community and to preserve those environmental resources and amenities that make the City of Bradbury a desirable place to live.

Land Use Policy 1 – The residential character of the community and environmental resources important to the City will be maintained.

Open-Space Policy No. 1 – Protect and preserve oak woodlands and mandate replacement planting of native oaks where oak woodlands are proposed for alteration.

Open-Space Policy No. 3 – Mandatory replacement planting of native trees and oaks.

Open-Space Policy No. 4 – Protect existing Blueline Streams.

Open-Space Policy No. 6 – Preservation of historically or culturally significant sites.

Open-Space Policy No. 7 – Protect wildlife and their habitats, including rare and endangered species.

Open-Space Policy No. 8 – Protection of rare and endangered plants.

Conservation Goal 3 – Protect the valuable watershed and natural habitat areas.

Conservation Policy 6 – Conserve riparian vegetation.

Conservation Policy 7 – Conserve wildlife habitat and assist residents in living with wildlife.

Conservation Policy 8 – Conserve oak woodlands.

Conservation Policy 12 – Protect sensitive plant species and their habitats.

Conservation Policy 13 – Protect rare, threatened, or endangered species.

Conservation Policy 14 – Explore the use of Habitat Conservation Plans and Natural Communities Conservation Programs.

Conservation Policy 19 – Protect natural resources.

Conservation Policy 21 – Protect archaeological, historical and paleontological resources

**(b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)**

The cumulative impacts analysis in the 1994 General Plan EIR focused on future development in the City of Bradbury and the surrounding Cities of Duarte, Monrovia and Irwindale. The impact-by-impact discussion determined that cumulative impacts were either less than significant or could only be considered on a site specific analysis.

The 2012-2030 General Plan Update elaborates the City's Vision, Goals, Policies, and Objectives and includes an Action Plan to implement those Goals, Policies and Objectives. The 2012-2030 General Plan Update also requires additional protection of resources and enhancement of environmental and quality of life factors through the following policies. With the addition of these policies, cumulative impacts remain ***less than significant***.

Open-Space Policy 1 – Protect and preserve oak woodlands and mandate replacement planting of native oaks where oak woodlands are proposed for alteration.

Open-Space Policy 2 – Protect water quality.

Open-Space Policy 3 – Mandatory replacement planting of native trees and oaks.

Open-Space Policy 4 – Protect existing Blueline Streams.

Open-Space Policy 6 – Preservation of historically or culturally significant sites.

Open-Space Policy 10 – Protect areas of outstanding scenic beauty.

Conservation Policy 1 – Protect water bodies, watersheds and courses from development impacts.

Conservation Policy 3 – Protect surface water resources from contamination.

Conservation Policy 7 – Conserve wildlife habitat and assist residents in living with wildlife.

Conservation Policy 8 – Conserve oak woodlands.

Conservation Policy 15 – Eliminate identified water pollution sources.

Conservation Policy 19 – Protect natural resources.

Conservation Policy 21 – Protect archaeological, historical and paleontological resources.

**(c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?**

Relying on goals, policies and programs in the General Plan for mitigation, the 1994 General Plan EIR found that all impacts could be reduced to below a level of significance.

As previously discussed, the City of Bradbury is almost entirely built-out and the 2012-2030 General Plan Update would not substantively change land use or the allowable development envelopes. Implementation of the General Plan would not result in any additional development beyond what has already been contemplated under the existing General Plan. Development will continue under the full build-out projections of the General Plan.

With the implementation of the goals, objectives and policies stated above in response XVIII (a) and (b) cumulative impacts in regards to this issue area are **less than significant**.

## **5. APPENDICES**

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A Traffic Evaluation

B Air Quality and Greenhouse Gas Evaluation

C Noise Analysis

D Biological Survey

E City of Bradbury General Plan Matrices

- City of Bradbury General Plan Comparison Matrix
- City of Bradbury General Plan Goals and Objectives Comparison Matrix

## **APPENDIX A – Traffic Evaluation**

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**CITY OF BRADBURY**  
**GENERAL PLAN UPDATE TRAFFIC EVALUATION**  
**CITY OF BRADBURY, CALIFORNIA**

**JANUARY 7, 2014**

**Prepared for:**

Mr. Dave Meyer  
LDM Associates  
10722 Arrow Route, Suite 822  
Rancho Cucamonga, CA 91730

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**Prepared by:**



Scott Sato, P.E.  
100 E. San Marcos Boulevard, Suite 400  
San Marcos, CA 92069

**TRAMES SOLUTIONS INC.**

(0053-0003-06)

# **CITY OF BRADBURY GENERAL PLAN UPDATE CIRCULATION ELEMENT**

## **TRAFFIC IMPACT ANALYSIS**

### **CITY OF BRADBURY, CALIFORNIA**

## **1.0 INTRODUCTION**

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The City of Bradbury is located north of the Foothill Freeway (I-210) and west of the terminus of the San Gabriel River Freeway (I-605). The City is bordered by the Angeles National Forest to the north, the City of Monrovia to the west, Duarte to the south, and Azusa to the east. Figure A illustrates the regional location of the City.

The Circulation Element represents the City's overall transportation plan to ensure that the growth and development indicated in the Land Use Element is adequately served. The transportation plan contributes to the form and character of the community by providing connections between neighborhoods and major transportation corridors.

The study objectives include evaluating key roadways that provide access into the City. The following conditions were analyzed:

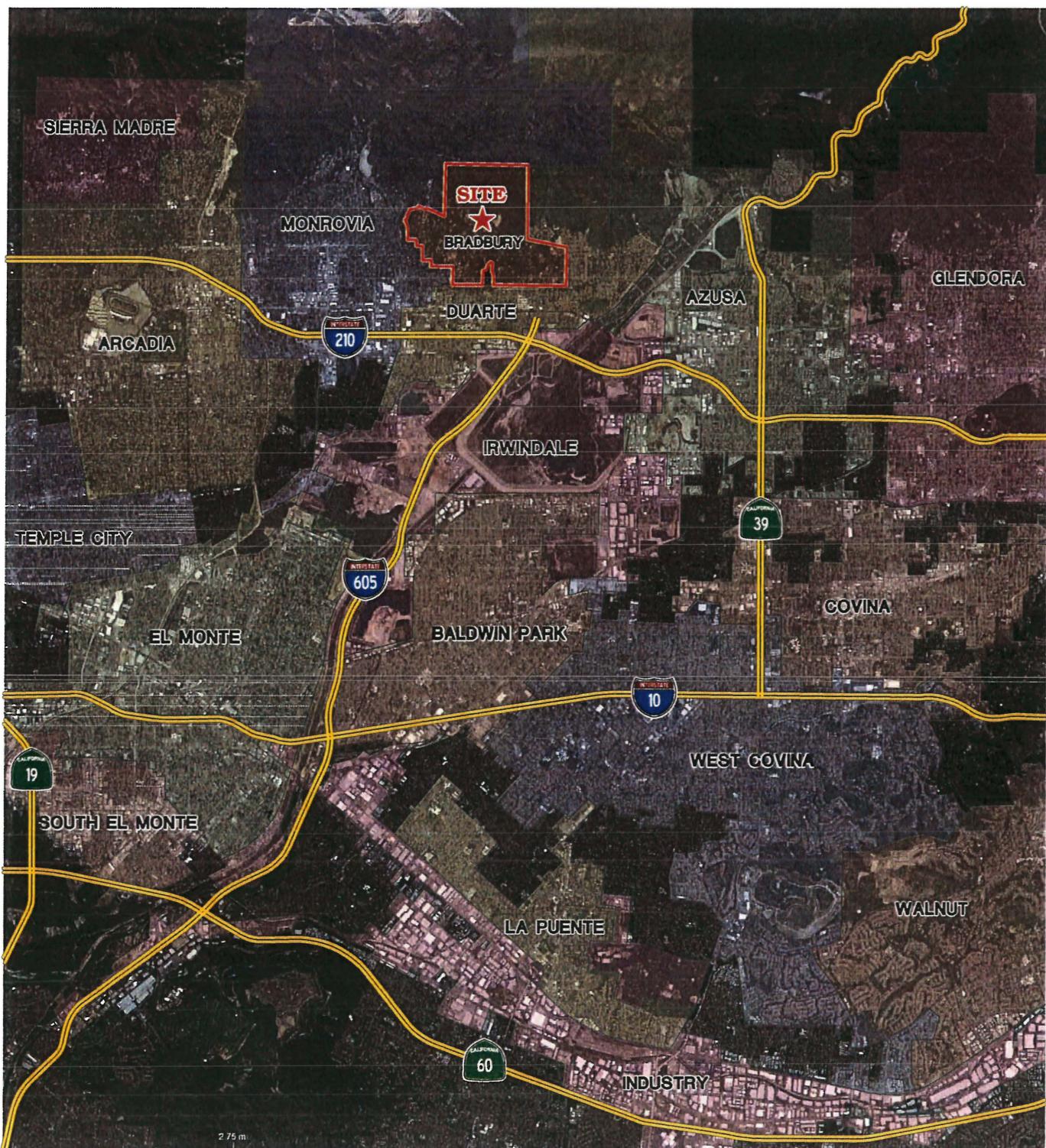
- **EXISTING TRAFFIC**

Existing daily traffic counts were collected to determine current conditions. This constitutes the baseline environmental setting for a CEQA analysis.

- **FUTURE CONDITIONS**

Future traffic conditions are estimated by adding existing traffic to the traffic generated by other vacant/underutilized parcels throughout the City. Since the City's roadways are not conducive to pass-through traffic from other Cities, the expected traffic growth can be attributed to the buildup of these parcels.

# FIGURE A REGIONAL MAP



## **2.0 EXISTING TRAFFIC CONDITIONS**

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The study area includes the roadway segments that provide access to the City. These segments include the following and are shown on Figure B:

ID	ROADWAY SEGMENTS
1	Deodar Lane, between Mountain Ave. and Palm Hill Ln.
2	Deodar Lane, between Wildrose Ave. and the gated entry.
3	Lemon Avenue, between Sombrero Rd. and Winston Ave.
4	Winston Avenue, between Royal Oaks Drive North and Lemon Ave.
5	Woodlyn Lane, between Royal Oaks Drive North and Deodar Ln.
6	Mt. Olive Drive, between Royal Oaks Drive and Gardi St.

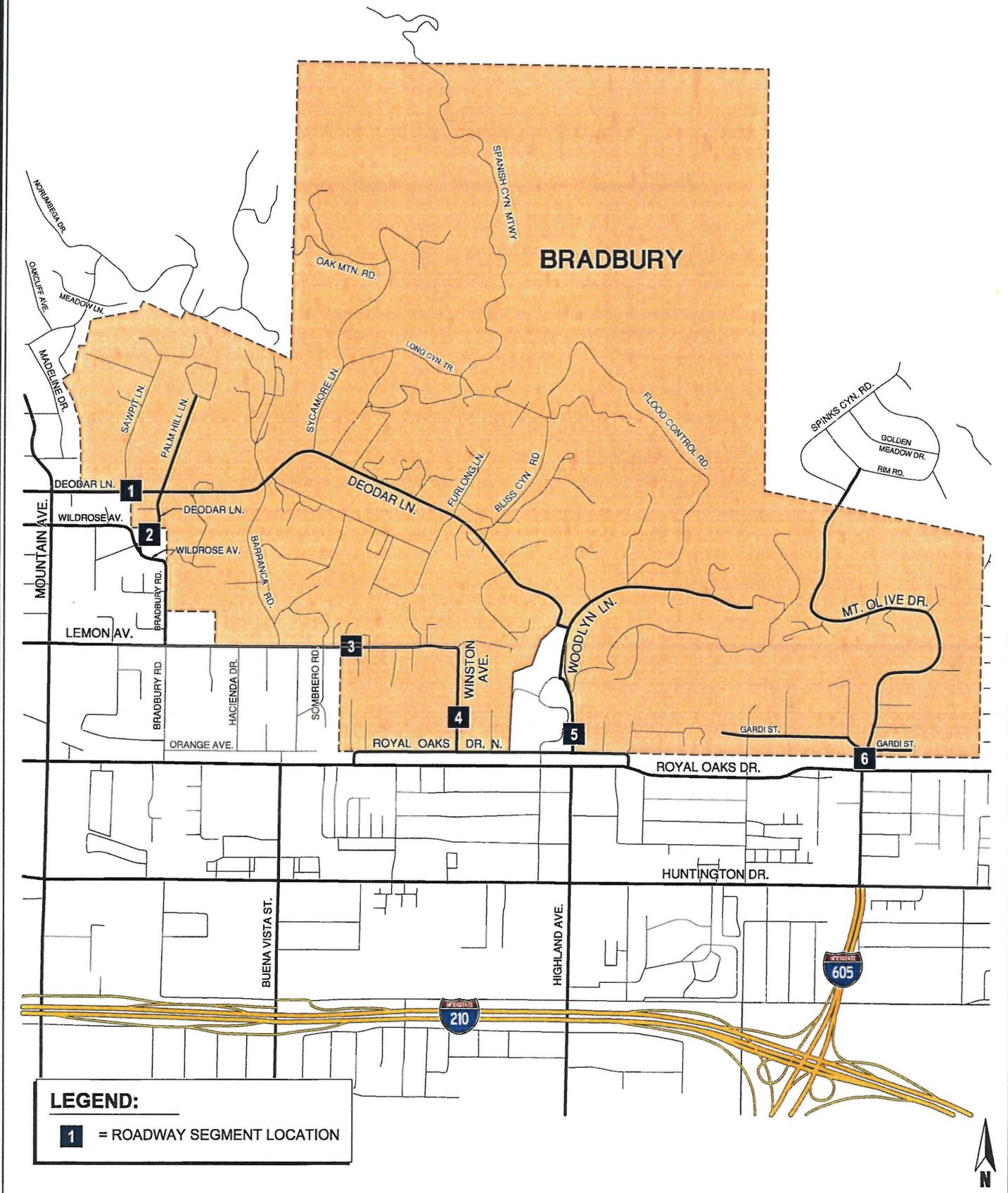
The roadways in the City of Bradbury range from collectors down to local residential streets. Collectors channel traffic from the local streets and distribute them to larger classified roadways such as arterials. The width of collectors allow for on-street parking with minimal impedances on through traffic. The capacity of collector roadways is 16,000 vehicles per day.

Local streets collect traffic from residences and distribute them to collectors. Parking is typically allowed on local streets but the relatively narrow width of the cross-section significantly reduces the roadways capacity and speeds. Motorists tend to experience more difficulty exiting residential driveways as traffic volumes increase. Industry standards suggest a “neighborhood” capacity of 2,000 vehicles per day as an appropriate threshold for these narrow, low speed roadways.

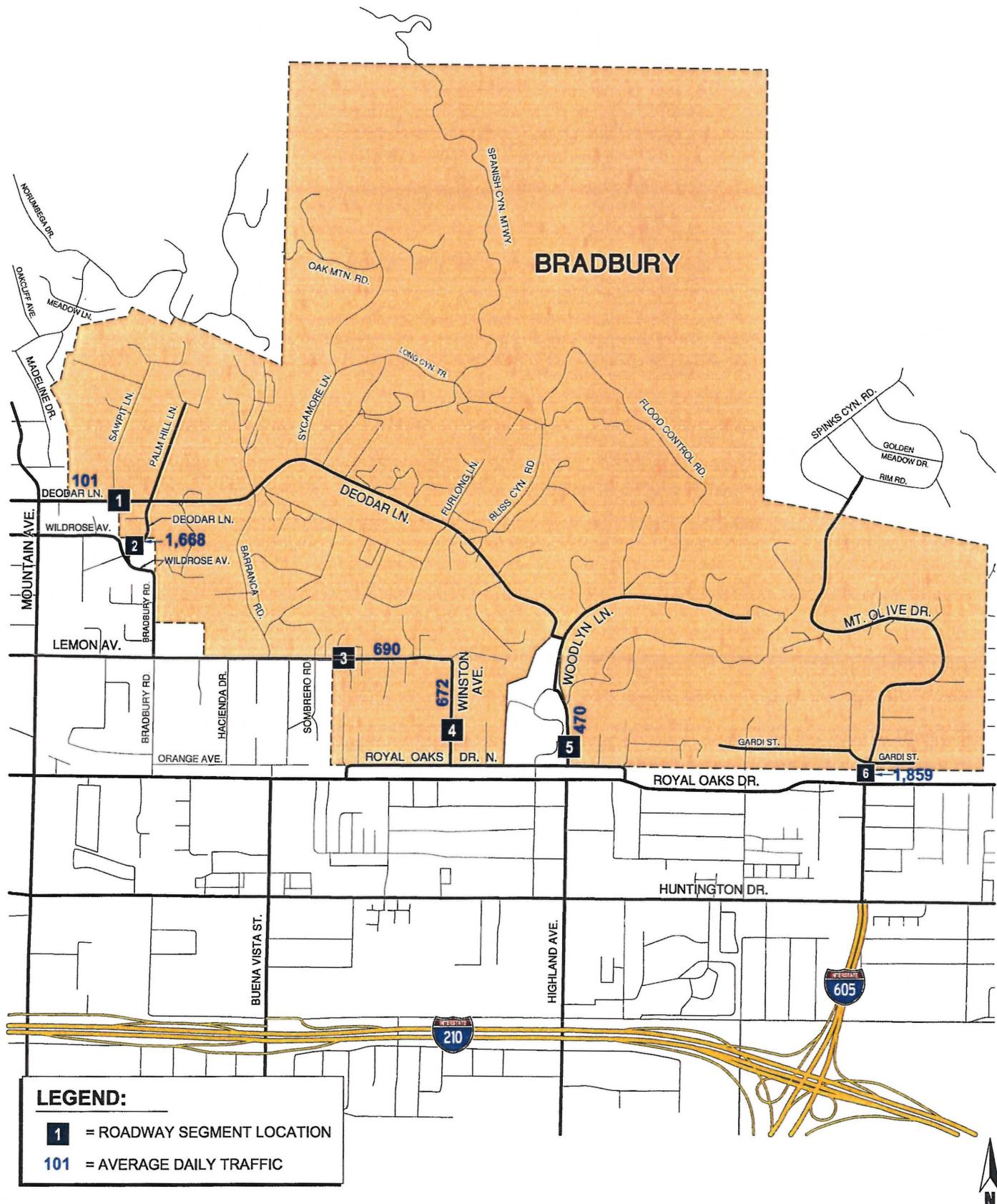
### **EXISTING TRAFFIC VOLUMES**

Existing average daily traffic (ADT) counts on the study area road segments are shown on Figure C. The traffic counts were collected in March 2013 on a typical weekday. The traffic count worksheets are included in Appendix "A".

**FIGURE B**  
**ROADWAY SEGMENT LOCATION MAP**



**FIGURE C**  
**EXISTING DAILY TRAFFIC COUNTS**



## **OPERATIONS ANALYSIS METHODOLOGY**

Level of Service (LOS) is a qualitative indicator that is used to describe the operative conditions of a roadway. The levels range from A to F, with LOS "A" being the best operating conditions and "F" being the worst. Levels of service are usually defined as A thru F. Beyond level of service E, capacity has been exceeded, and arriving traffic will exceed the ability of a given street to accommodate it. A description of the meaning of the six Levels of Service (LOS) is as follows:

- Level of Service A indicates no physical restriction on operating speeds.
- Level of Service B indicates stable flow with few restrictions on operating speed.
- Level of Service C indicates stable flow and more restrictions on speed and lane changing due to higher volumes of traffic.
- Level of Service D indicates approaching unstable flow conditions with little freedom to maneuver and which may be tolerable for short periods.
- Level of Service E is the absolute capacity of the road. It is characterized by unstable flow, lower operating speeds than LOS D, and some momentary stoppages.
- Level of Service F indicates forced flow operation (more traffic demand than there is capacity on the road) where the highway acts as a storage area and many stoppages occur.

Roadway segments are evaluated based on the calculated daily volume-to-capacity ratio. The following illustrates the correspondence between the volume-to-capacity ratio and subsequent levels of service.

VOLUME-TO-CAPACITY RATIO	LOS
0-0.60	A
0.61-0.70	B
0.71-0.80	C
0.81-0.90	D
0.91-1.00	E
Greater than 1.00	F

Generally, LOS "D" is the maximum allowable threshold for roadway segments. Therefore, LOS "E" or "F" is considered unacceptable and requires improvements measures.

The results of the existing conditions roadway segment analysis are summarized in Table 1. Based on the calculated roadway segment levels of service, the analyzed locations are currently operating at acceptable conditions.

**TABLE 1**  
**EXISTING CONDITIONS ROADWAY SEGMENT LEVEL OF SERVICE**

ID	Roadway Segment	Existing Daily Traffic Volume	Roadway Capacity	V/C <sup>1</sup> Ratio	Level of Service
1	Deodar Ln., between Mtn. Ave. and Palm Hill Ln.	101	2,000	0.05	A
2	Deodar Ln., between Wildrose Ave. and the gated entry	1,668	16,000	0.10	A
3	Lemon Ave, between Sombrero Rd. and Winston Ave.	690	16,000	0.04	A
4	Winston Ave., between Royal Oaks Drive N. and Lemon Ave.	672	2,000	0.34	A
5	Woodlyn Ln., between Royal Oaks Drive N. and Deodar Ln.	470	2,000	0.24	A
6	Mt. Olive Drive, between Royal Oaks Drive and Gardi St.	1,859	16,000	0.12	A

<sup>1</sup> V/C = Volume-to-Capacity

### **3.0 PROJECTED FUTURE TRAFFIC**

---

This section of the report quantifies the number of trips generated by the proposed project and other known developments in the area. The City of Bradbury is nearly built out. However, the City has identified that approximately 97 additional residential units can be constructed in the undeveloped/underutilized parcels throughout the City.

#### **UNDEVELOPED/UNDERUTILIZED TRIP GENERATION**

Trip generation represents the amount of traffic which is attracted and produced by a development. For the purpose of this analysis, the following land use assumption is evaluated:

- 97 unbuilt residential units

Trip generation rates for the proposed development are shown in Table 2. The trip generation rates are based upon data collected by the Institute of Transportation Engineers (ITE).

The daily and peak hour trip generations for the proposed project are shown on Table 3. The undeveloped/underutilized developments are projected to generate a total of approximately 923 trip-ends per day with 72 vehicles per hour during the AM peak hour and 97 vehicles per hour during the PM peak hour.

#### **TOTAL DAILY FUTURE TRAFFIC VOLUMES**

Based on the identified trip generation for the undeveloped/underutilized developments on the roadways throughout the study area, future average daily traffic (ADT) are shown on Figure D.

**TABLE 2**  
**TRIP GENERATION RATES<sup>1</sup>**

Land Use	ITE Code	Quantity	Units <sup>2</sup>	Peak Hour Trip Rates						Daily	
				AM			PM				
				In	Out	Total	In	Out	Total		
Single Fam. Detached	210	81	DU	0.19	0.56	0.75	0.63	0.37	1.00	9.52	

<sup>1</sup> Source: ITE (Institute of Transportation Engineers) Trip Generation Manual, 9th Edition, 2012.

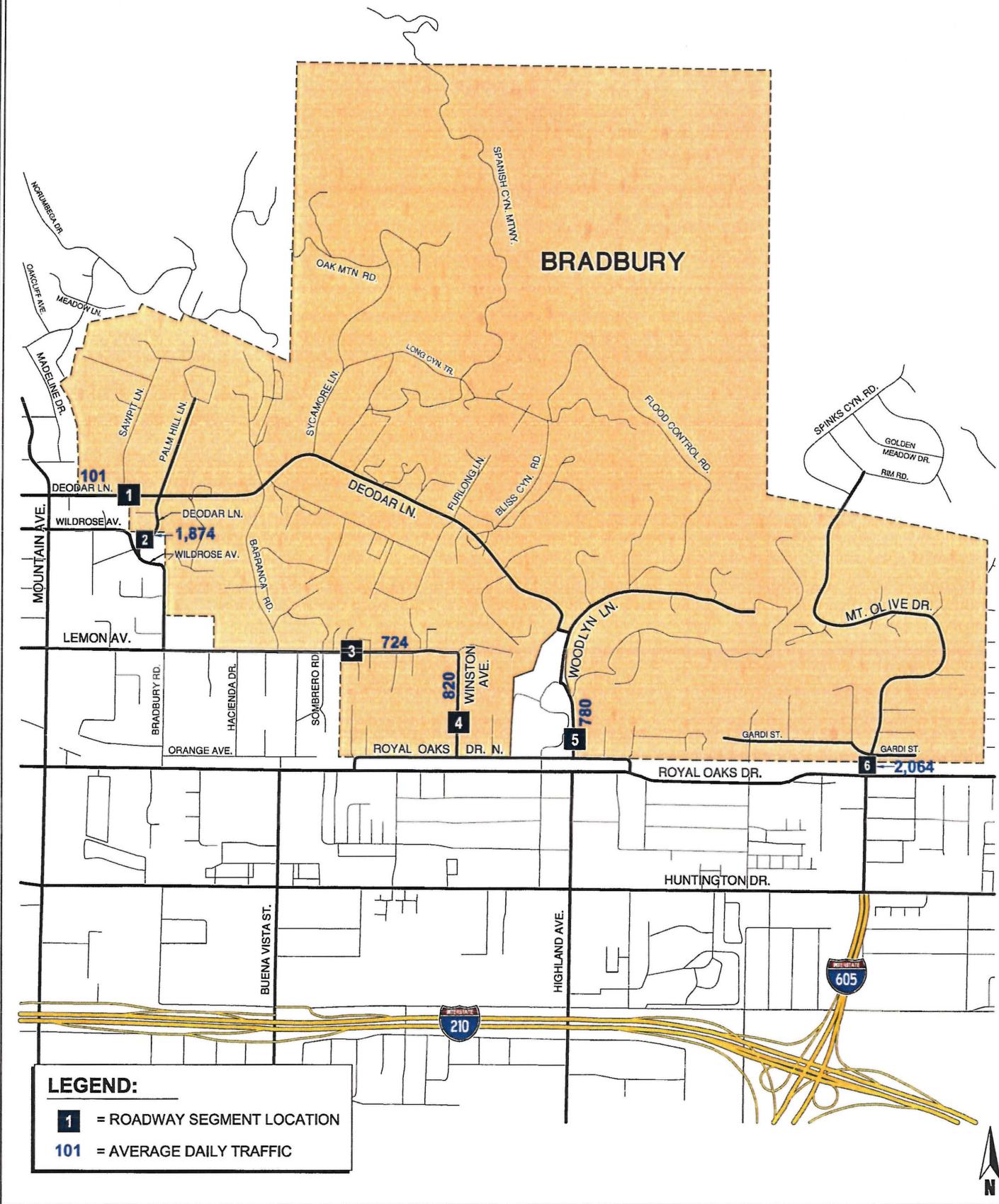
<sup>2</sup> DU = Dwelling Units

**TABLE 3**  
**TRIP GENERATION SUMMARY**

Land Use	Quantity	Units <sup>1</sup>	Peak Hour Trip Rates						Daily	
			AM			PM				
			In	Out	Total	In	Out	Total		
Single Fam. Detached	97	DU	18	54	72	61	36	97	923	
<b>Total</b>			<b>18</b>	<b>54</b>	<b>72</b>	<b>61</b>	<b>36</b>	<b>97</b>	<b>923</b>	

<sup>1</sup> DU = Dwelling Units

**FIGURE D**  
**FUTURE DAILY TRAFFIC VOLUMES**



## **4.0 TRAFFIC ANALYSIS**

---

For future traffic conditions, the study area roadway streets are anticipated to operate at acceptable levels of service based on daily volume-to-capacity ratios. Table 4 presents a summary of the future volume-to-capacity ratios along with the corresponding levels of service.

**TABLE 4**  
**FUTURE CONDITIONS ROADWAY SEGMENT LEVEL OF SERVICE**

ID	Roadway Segment	Existing Daily Traffic Volume	Added Traffic	Total Traffic	Roadway Capacity	V/C <sup>1</sup> Ratio	Level of Service
1	Deodar Ln., between Mtn. Ave. and Palm Hill Ln.	101	0	101	2,000	0.05	A
2	Deodar Ln., between Wildrose Ave. and the gated entry	1,668	206	1,874	16,000	0.12	A
3	Lemon Ave, between Sombrero Rd. and Winston Ave.	690	34	724	16,000	0.05	A
4	Winston Ave., between Royal Oaks Drive N. and Lemon Ave.	672	148	820	2,000	0.41	A
5	Woodlyn Ln., between Royal Oaks Drive N. and Deodar Ln.	470	310	780	2,000	0.39	A
6	Mt. Olive Drive, between Royal Oaks Drive and Gardi St.	1,859	205	2,064	16,000	0.13	A

<sup>1</sup> V/C = Volume-to-Capacity

## **5.0 FINDINGS AND CONCLUSIONS**

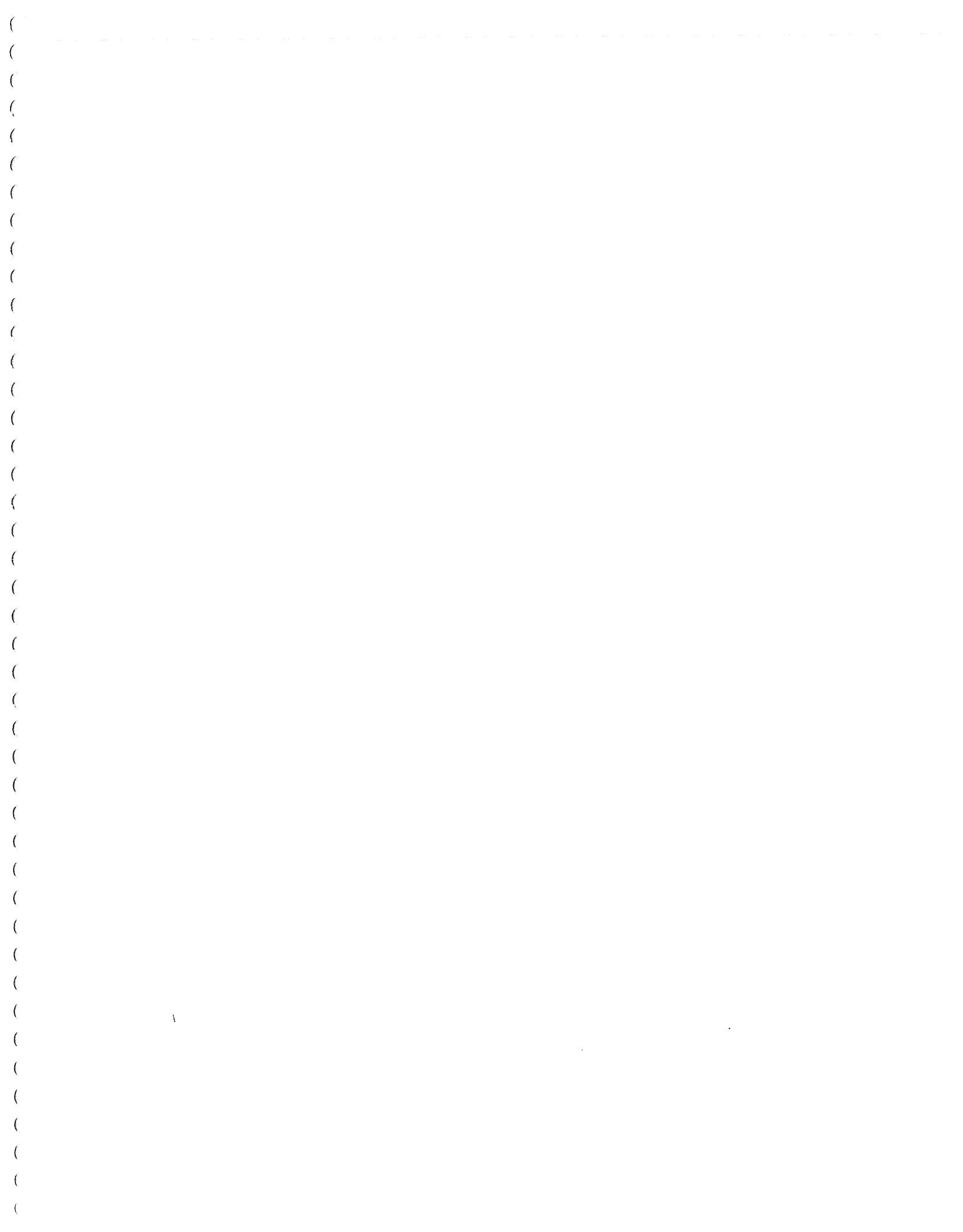
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The study area roadway segments are currently operating at acceptable conditions based on the daily volume-to-capacity ratios and corresponding levels of service. For future conditions with the buildup of 97 future undeveloped/underutilized residential units, the roadway segments are expected to continue to operate at acceptable operating conditions.

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## **APPENDIX A**

### TRAFFIC COUNT WORKSHEETS



Counts Unlimietd, Inc.  
 PO Box 1178  
 Corona, CA 92878  
 (951) 268-6268

Page 1

City of Bradbury  
 Deoder Lane  
 E/ Mountain Avenue  
 24 Hour Directional Volume Count

BDY001  
 Site Code: 201-13081  
 Date Start: 12-Mar-13  
 Date End: 12-Mar-13

Start	12-Mar-13	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Tue	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	0			0	0				
12:15		0	0			0	0				
12:30		0	0			0	3				
12:45		0	1	0	1	0	0	0	3	0	4
01:00		0	0			0	0				
01:15		0	2			0	2				
01:30		0	0			0	0				
01:45		0	4	0	6	0	0	0	2	0	8
02:00		0	3			0	2				
02:15		0	1			0	1				
02:30		0	0			0	0				
02:45		0	0	0	4	0	0	0	3	0	7
03:00		0	0			0	1				
03:15		0	0			0	0				
03:30		0	0			0	0				
03:45		0	0	0	0	0	0	0	1	0	1
04:00		0	0			0	0				
04:15		0	1			0	2				
04:30		2	1			1	1				
04:45		0	6	2	8	0	1	1	4	3	12
05:00		0	2			0	1				
05:15		0	2			0	2				
05:30		0	4			0	3				
05:45		0	2	0	10	0	0	0	6	0	16
06:00		0	2			1	2				
06:15		0	1			0	0				
06:30		0	0			1	1				
06:45		0	2	0	5	0	0	2	3	2	8
07:00		3	0			4	0	2	3	2	8
07:15		0	0			1	0				
07:30		0	0			1	1				
07:45		0	0	3	0	1	0	7	1	10	1
08:00		2	0			0	0				
08:15		0	0			0	0				
08:30		2	0			3	0				
08:45		0	0	4	0	1	0	4	0	8	0
09:00		2	0			0	0				
09:15		0	0			0	0				
09:30		0	4			1	0				
09:45		2	2	4	6	2	0	3	0	7	6
10:00		0	0			1	0				
10:15		0	0			0	0				
10:30		0	0			0	0				
10:45		0	2	0	2	1	0	2	0	2	2
11:00		0	0			0	0				
11:15		2	0			0	0				
11:30		0	0			0	0				
11:45		0	0	2	0	2	0	2	0	4	0
Total Combined		15	42	15	42	21	23	21	23	36	65
AM Peak Vol.		57		57		44		44		101	
P.H.F.	0.333	07:45		07:00							
PM Peak Vol.		14		7		0.438					
P.H.F.	0.583	04:45		04:45							
Percentag e	26.3%	73.7%				47.7%	52.3%				
ADT/AAD T	ADT 101	AADT 101									

Counts Unlimietd, Inc.  
PO Box 1178  
Corona, CA 92878  
(951) 268-6268

Page 1

City of Bradbury  
Deoder Lane

E/ Wild Rose Avenue

**24 Hour Directional Volume Count**

BDY002

Site Code: 201-13081

Date Start: 12-Mar-13

Date End: 12-Mar-13

Start	12-Mar-13	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Tue	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	13			0	19				
12:15		0	20			1	22				
12:30		0	21			1	14				
12:45		0	22	0	76	0	16	2	71	2	147
01:00		2	9			0	19				
01:15		0	10			0	11				
01:30		0	4			0	14				
01:45		0	19	2	42	0	14	0	58	2	100
02:00		0	18			0	12				
02:15		0	19			0	25				
02:30		0	12			0	21				
02:45		0	23	0	72	1	16	1	74	1	146
03:00		0	8			0	11				
03:15		0	17			0	10				
03:30	2	12				0	20				
03:45	0	17		2	54	0	25	0	66	2	120
04:00	0	12				0	23				
04:15	0	7				0	14				
04:30	0	11				2	10				
04:45	0	8		0	38	2	7	4	54	4	92
05:00	3	12				2	18				
05:15	4	10				3	11				
05:30	3	21				0	11				
05:45	4	10		14	53	2	8	7	48	21	101
06:00	4	12				3	11				
06:15	5	19				6	7				
06:30	9	14				9	10				
06:45	29	15		47	60	2	6	20	34	67	94
07:00	9	14				8	12				
07:15	15	10				17	6				
07:30	5	7				10	7				
07:45	16	6		45	37	19	9	54	34	99	71
08:00	22	9				5	4				
08:15	15	11				7	3				
08:30	12	5				10	9				
08:45	9	6		58	31	8	3	30	19	88	50
09:00	9	8				12	4				
09:15	23	11				10	0				
09:30	18	9				16	4				
09:45	16	12		66	40	9	2	47	10	113	50
10:00	13	4				14	8				
10:15	18	6				12	2				
10:30	17	6				14	2				
10:45	13	2		61	18	11	1	51	13	112	31
11:00	18	5				15	0				
11:15	14	1				20	1				
11:30	18	6				17	1				
11:45	20	3		70	15	16	0	68	2	138	17
Total		365	536	365	536	284	483	284	483	649	1019
Combined Total		901		901		767		767		1668	
AM Peak Vol.	09:15					11:00					
P.H.F.	0.761					68					
PM Peak Vol.		12:00				0.850					
P.H.F.		76					03:30				
		0.864					82				
0.820											
Percentag e		40.5%	59.5%			37.0%	63.0%				
ADT/AAD T		ADT 1,668		AADT 1,668							

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City of Bradbury  
 Lemon Avenue  
 E/ Sombrero Road

24 Hour Directional Volume Count

Start Time	12-Mar-13 Tue	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	4			0	0				
12:15		0	1			0	6				
12:30		0	11			0	5				
12:45		0	6	0	22	0	4	0	15	0	37
01:00		1	9			0	3				
01:15		0	3			0	2				
01:30		0	11			1	1				
01:45		0	3	1	26	0	6	1	12	2	38
02:00		1	9			0	6				
02:15		0	8			0	3				
02:30		0	5			0	1				
02:45		0	5	1	27	0	6	0	16	1	43
03:00		0	6			0	3				
03:15		0	12			0	1				
03:30		0	2			0	0				
03:45		0	9	0	29	0	1	0	5	0	34
04:00		0	11			0	4				
04:15		0	10			1	5				
04:30		0	12			0	4				
04:45		0	34	0	67	0	5	1	18	1	85
05:00		0	26			0	3				
05:15		1	18			0	2				
05:30		0	27			0	4				
05:45		0	18	1	89	1	4	1	13	2	102
06:00		1	15			1	1				
06:15		0	15			2	6				
06:30		0	5			3	2				
06:45		2	5	3	40	5	4	11	13	14	53
07:00		3	7			10	1				
07:15		1	12			17	2				
07:30		2	4			16	2				
07:45		6	6	12	29	19	2	62	7	74	36
08:00		2	4			7	5				
08:15		5	1			8	2				
08:30		0	2			1	1				
08:45		1	4	8	11	10	0	26	8	34	19
09:00		4	3			5	2				
09:15		1	3			5	1				
09:30		3	1			5	0				
09:45		2	4	10	11	5	1	20	4	30	15
10:00		4	1			2	0				
10:15		4	1			1	0				
10:30		3	1			6	1				
10:45		3	0	14	3	1	2	10	3	24	6
11:00		6	1			3	2				
11:15		9	1			1	0				
11:30		2	2			5	1				
11:45		3	0	20	4	4	0	13	3	33	7
Total		70	358	70	358	145	117	145	117	215	475
Combined Total		428		428		262		262		690	
AM Peak Vol.		10:30				07:00					
P.H.F.		21				62					
		0.583				0.816					
PM Peak Vol.		04:45				00:15					
P.H.F.		105				18					
		0.772				0.750					
Percentage		16.4%	83.6%			55.3%	44.7%				
ADT/AADT		ADT 690		AADT 690							

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City of Bradbury  
Winston Avenue  
N/ Royal Oaks Drive

BDY004

Site Code: 201-13081  
Date Start: 12-Mar-13  
Date End: 12-Mar-13

24 Hour Directional Volume Count

Start	12-Mar-13	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals		
Time	Tue	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	
12:00		0	3			0	3					
12:15		1	5			1	3					
12:30		0	4			0	12					
12:45		0	4	1	16	0	5	1	23	2	39	
01:00		0	2			1	5					
01:15		0	2			0	4					
01:30		1	2			0	11					
01:45		0	8	1	14	0	3	1	23	2	37	
02:00		0	9			1	10					
02:15		0	4			0	8					
02:30		0	3			0	4					
02:45		0	2		0	18	0	9	1	31	1	49
03:00		0	4			0	7					
03:15		0	5			1	9					
03:30		0	2			0	4					
03:45		0	1	0	12	0	8	1	28	1	40	
04:00		0	4			0	14					
04:15		0	5			0	10					
04:30		0	2			0	9					
04:45		0	5		0	16	0	22	0	55	0	71
05:00		0	2			0	24					
05:15		0	3			1	21					
05:30		1	5			0	22					
05:45		0	2	1	12	1	23	2	90	3	102	
06:00		1	2			1	15					
06:15		2	3			1	12					
06:30		1	3			1	4					
06:45		3	2	7	10	1	8	4	39	11	49	
07:00		9	3			1	7					
07:15	18	2				3	10					
07:30	10	3				2	1					
07:45	17	2	54	10		9	4	15	22	69	32	
08:00	9	2				7	2					
08:15	11	2				6	1					
08:30	2	2				4	0					
08:45	6	1	28	7		2	5	19	8	47	15	
09:00	6	1				5	1					
09:15	6	0				1	2					
09:30	2	0				3	1					
09:45	6	1	20	2		2	1	11	5	31	7	
10:00	2	1				2	1					
10:15	2	1				3	1					
10:30	3	0				1	0					
10:45	1	1	8	3		4	0	10	2	18	5	
11:00	3	0				7	2					
11:15	1	1				9	0					
11:30	2	1				3	1					
11:45	3	0	9	2		8	0	27	3	36	5	
Total		129	122	129	122	92	329	92	329	221	451	
Combined Total		251		251		421		421		672		
AM Peak Vol.	07:00					11:00						
P.H.F.	54					27						
PM Peak Vol.	0.750					0.750						
PM Peak P.H.F.	01:45						05:00					
	24						90					
	0.667						0.938					
Percentage	51.4%	48.6%				21.9%	78.1%					
ADT/AADT	ADT 672	AADT 672										

PO Box 1178

Corona, CA 92878

(951) 268-6268

BDY005

Site Code: 201-13081

Date Start: 12-Mar-13

Date End: 12-Mar-13

City of Bradbury

Woodlyn Lane

N/ Royal Oaks Drive

## 24 Hour Directional Volume Count

Start Time	12-Mar-13 Tue	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	4			0	3				
12:15		0	4			0	5				
12:30		0	4			0	3				
12:45	2	7		2	19	0	3	0	14	2	33
01:00	0	5				0	4				
01:15	0	2				0	0				
01:30	0	4				0	3				
01:45	0	2		0	13	0	4	0	11	0	24
02:00	1	4				0	8				
02:15	0	2				0	6				
02:30	0	8				0	2				
02:45	0	3		1	17	0	2	0	18	1	35
03:00	0	7				0	4				
03:15	0	1				0	2				
03:30	0	7				0	4				
03:45	0	8		0	23	0	4	0	14	0	37
04:00	0	4				0	6				
04:15	2	0				0	3				
04:30	0	1				1	7				
04:45	0	7		2	12	1	1	2	17	4	29
05:00	2	9				0	5				
05:15	0	9				0	3				
05:30	0	6				1	4				
05:45	0	4		2	28	0	3	1	15	3	43
06:00	0	9				1	3				
06:15	0	5				2	5				
06:30	1	8				3	0				
06:45	2	3		3	25	4	3	10	11	13	36
07:00	0	2				1	6				
07:15	1	4				5	1				
07:30	6	4				5	2				
07:45	4	3		11	13	6	1	17	10	28	23
08:00	3	4				4	1				
08:15	11	3				4	0				
08:30	2	0				4	0				
08:45	5	0		21	7	7	1	19	2	40	9
09:00	3	4				7	0				
09:15	2	3				4	0				
09:30	3	3				2	1				
09:45	2	2		10	12	4	1	17	2	27	14
10:00	4	0				6	0				
10:15	7	2				1	0				
10:30	7	1				3	0				
10:45	8	2		26	5	4	0	14	0	40	5
11:00	0	0				3	0				
11:15	2	0				6	1				
11:30	2	0				0	0				
11:45	7	0		11	0	3	0	12	1	23	1
Total		89	174		89	174	92	115	92	115	181
Combined Total		263		263		207		207		470	
AM Peak Vol.		10:00				08:15					
P.H.F.		26				22					
PM Peak Vol.		0.591				0.786					
P.H.F.		04:45				01:30					
		31				21					
		0.861				0.656					
Percentage		33.8%	66.2%			44.4%	55.6%				
ADT/AADT		ADT 470		AADT 470							

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City of Bradbury  
Mount Olive Drive  
N/ Royal Oaks Drive

BDY006

Site Code: 201-13081  
Date Start: 12-Mar-13  
Date End: 12-Mar-13

24 Hour Directional Volume Count

Start Time	12-Mar-13 Tue	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	13			0	18				
12:15		1	7			2	11				
12:30		1	18			0	16				
12:45		1	16	3	54	0	15	2	60	5	114
01:00		0	15			2	16				
01:15		0	16			4	8				
01:30		1	13			0	21				
01:45		1	14	2	58	1	17	7	62	9	120
02:00		1	22			0	18				
02:15		0	21			1	18				
02:30		1	24			0	15				
02:45		0	12	2	79	0	7	1	58	3	137
03:00		1	16			0	9				
03:15		0	17			1	15				
03:30		0	13			1	13				
03:45		1	16	2	62	0	12	2	49	4	111
04:00		1	16			0	5				
04:15		0	9			1	13				
04:30		0	21			3	8				
04:45		1	23	2	69	1	14	5	40	7	109
05:00		1	20			1	17				
05:15		1	14			7	15				
05:30		1	10			3	20				
05:45		2	24	5	68	6	10	17	62	22	130
06:00		2	27			9	16				
06:15		1	14			8	8				
06:30		3	17			6	17				
06:45		2	15	8	73	12	8	35	49	43	122
07:00		9	18			20	10				
07:15		13	12			29	15				
07:30		9	19			28	7				
07:45		11	21	42	70	23	10	100	42	142	112
08:00		13	16			20	9				
08:15		16	17			17	12				
08:30		14	17			17	8				
08:45		12	14	55	64	28	6	82	35	137	99
09:00		11	13			22	7				
09:15		5	9			14	1				
09:30		10	11			17	3				
09:45		7	6	33	39	16	4	69	15	102	54
10:00		15	9			12	3				
10:15		15	14			20	0				
10:30		6	9			10	3				
10:45		13	5	49	37	14	3	56	9	105	46
11:00		15	4			18	1				
11:15		6	3			19	0				
11:30		11	2			17	2				
11:45		16	0	48	9	11	1	65	4	113	13
Total		251	682	251	682	441	485	441	485	692	1167
Combined Total		933		933		926		926		1859	
AM Peak Vol.		08:00				07:00					
P.H.F.		55				100					
PM Peak Vol.		0.859				0.862					
P.H.F.		0.859									
PM Peak Vol.		05:45					01:30				
P.H.F.		82					74				
P.H.F.		0.759					0.881				
Percentage		26.9%	73.1%			47.6%	52.4%				
ADT/AADT		ADT 1,859		AADT 1,859							

## **APPENDIX B – Air Quality and Greenhouse Gas Emissions Evaluation**

January 16, 2014

Mr. Dave Meyer  
LDM Associates  
10722 Arrow Route, Suite 822  
Rancho Cucamonga, CA 91730

**Subject: City of Bradbury General Plan Update Air Quality and Greenhouse Gas Evaluation**

**PURPOSE**

The purpose of this evaluation is to determine the air quality and greenhouse gas impacts associated with the implementation of the City of Bradbury's General Plan update.

The entire City is developed with single-family residential dwelling units. Publically owned property consists of the Civic Center; Royal Oaks Elementary School; Los Angeles County Flood Control District owned Flood Control Debris Basins and Channels; and privately owned Water Reservoirs. The vacant parcels within the City fall within two categories. Those parcels located in the northernmost portion of the City (Category 1) are constrained by steep slopes, lack of access, lack of utilities, protected ridgelines and riparian habitat; and sensitive native vegetation. Additionally, the City's Hillside Development Standards severely restrict grading of these slopes which are in excess of 50%. The remaining vacant 24 parcels and 5 underutilized parcels, (Category 2) are considered as having potential for development of single-family residential dwellings.

**Category 1** is comprised of a 302-acre area consisting of eight (8) parcels in the City's northern boundary adjacent to the City of Monrovia and the Angeles National Forest. The General Plan Land Use Map identifies this area as Open Space-Hillside Preservation, Privately Owned Undeveloped, having a maximum density of one dwelling unit per five acres. The area contains hillsides in excess of 50%; numerous protected ridgelines, blueline streams; earthquake induced landslide zones; lack of public or private access; lack of public utilities and habitat that may include sensitive or endangered flora and fauna. These development restrictions can lead one to consider that development of the area is physically and economically infeasible. This area is further restricted by the designation as a Very High Fire Hazard Severity Zone in

Mr. Dave Meyer  
LDM Associates  
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compliance with California State Law. The area has been zoned A-5 SP (Agriculture-Residential Specific Plan). If future circumstances change a Specific Development Plan could be submitted for consideration.

Use of this area could include the creation of a conservation conservancy/easement; the use of development right transfer strategies or cluster development concepts.

CATEGORY 1							
VACANT OPEN SPACE HILLSIDE PRESERVATION PARCELS							
	Parcel No.	Area.	Zone	Land Use	Potential DU's	Potential 2 <sup>nd</sup> DU's	Total DU's
1.	8527-001-001	41.40	A-5 (SP)	Estate 5-Ac	1	1	2
2.	8527-001-008	70.00	A-5 (SP)	Estate 5-Ac	1	1	2
3.	8527-001-009	20.54	A-5 (SP)	Estate 5-Ac	1	1	2
4.	8527-001-010	59.19	A-5 (SP)	Estate 5-Ac	1	1	2
5.	8527-001-012	59.30	A-5 (SP)	Estate 5-Ac	1	1	2
6.	8527-005-001	8.37	A-5 (SP)	Estate 5-Ac	1	1	2
7.	8527-005-002	1.03	A-5 (SP)	Estate 5-Ac	1	1	2
8.	8527-005-004	42.36	A-5 (SP)	Estate 5-Ac	1	1	2
	<b>Total</b>	<b>302.19</b>			<b>8</b>	<b>8</b>	<b>16</b>

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**Category 2** is comprised of five (5) Underutilized and twenty-four (24) Vacant parcels. All of these sites are considered as appropriate for development of single-family residential dwelling units.

CATEGORY 2							
-UNDERUTILIZED PARCELS							
	Parcel No.	Parcel Size	Zone	Land Use	Potential No. of Units	Potential No. of 2nd DU's	Total No. Potential DU's
1.	8527-021-041	12.40-ac	A-1	Estate – 1 unit per acre	6	7	13
2.	8527-023-020	2.75 ac	A-1	Estate – 1 unit per acre	1	2	3
3.	8527-023-021	3.80-ac	A-1	Estate – 1 unit per acre	2	3	5
4.	8527-002-014	12.8-ac	A-5	Estate – 0.2unit per-acre	1	2	3
5.	8527-003-035	2.08 ac	A-1	Estate – 1 unit per acre	2	2	4
<b>Total</b>		<b>33.83 ac</b>			<b>12</b>	<b>16</b>	<b>28</b>

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 LDM Associates  
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CATEGORY 2							
VACANT UNDEVELOPED RESIDENTIAL PARCELS							
	Parcel No.	Parcel Size	Zone	Land Use	Potential No. of Units	Potential No of 2 <sup>nd</sup> Dwellings	Total No. of Potential DU's
1.	8527-002-023	5.58	A-5	Estate 5-Ac	1	1	2
2.	8527-004-020	2.12	A-5	Estate 5-Ac	1	1	2
3.	8527-006-019	4.96	A-2	Estate 2-Ac	1	1	2
4.	8527-007-023	0.39	A-2	Estate 2-Ac	1	1	2
5.	8527-007-024	1.96	A-2	Estate 2-Ac	1	1	2
6.	8527-007-025	2.14	A-2	Estate 2-Ac	1	1	2
7.	8527-007-026	2.32	A-2	Estate 2-Ac	1	1	2
8.	8527-007-027	2.87	A-2	Estate 2-Ac	1	1	2
9.	8527-016-009	8.01	A-2	Estate 2-Ac	3	3	6
10.	8527-016-019	2.03	A-2	Estate 2-Ac	1	1	2
11.	8527-016-035	1.35	A-2	Estate 2-Ac	1	1	2
12.	8527-016-036	2.18	A-2	Estate 2-Ac	1	1	2
13.	8527-016-037	1.18	A-2 (SP)	Estate 2-Ac	1	0	1
14.	8527-016-039	1.29	A-2 (SP)	Estate 2-Ac	1	0	1
15.	8527-021-011	1.54	A-2	Estate 2-Ac	1	1	2
16.	8527-021-044	1.13	A-1	Estate 1-Ac	1	1	2
17.	8527-024-032	5.3	A-5	Estate 5-Ac	1	1	2
18.	8527-025-035	2.05	A-5	Estate 5-Ac	1	1	2
19.	8527-026-006	2.90	A-5	Estate 5-Ac	1	2	3
20.	8527-026-033	2.40	A-5	Estate 5-Ac	1	1	2
21.	8527-026-034 & 8527-026-036	2.29	A-5	Estate 5-Ac	1	1	2
22.	8527-029-001	2.54	A-5	Estate 5-Ac	1	1	2
23.	8527-029-017	7.16	A-5	Estate 5-Ac	1	1	2
24.	8527-023-012	2.13	A-1	Estate 1-Ac	2	2	4
<b>Total</b>		<b>67.82</b>			<b>27</b>	<b>26</b>	<b>53</b>

Based on the latest land use information, it appears that 97 dwelling units can be developed under the General Plan Update.

## **SUMMARY**

The results of the analysis support the following conclusions:

- The project is in compliance with the SCAQMD's 2012 Air Quality Management Plan.
- The project-generated emissions do not have the potential to violate federal and state ambient air quality standards.
- The project's contribution to cumulative impacts is not cumulatively considerable.

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LDM Associates  
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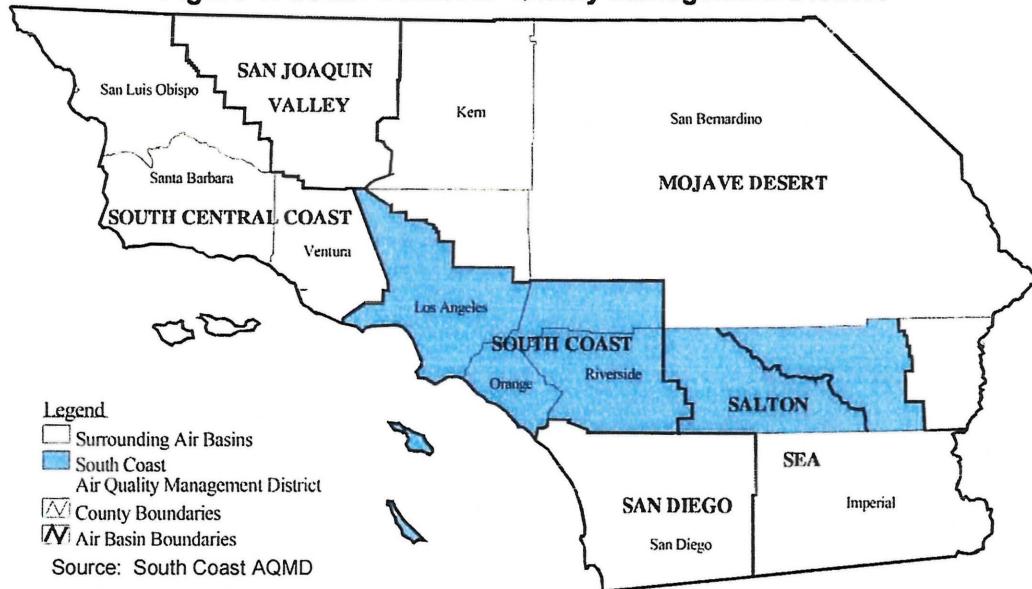
- The project does not have the potential to expose sensitive receptors to substantial pollutant concentrations.
- Project-generated odors will not affect a substantial number of people.
- Project-generated greenhouse gas emissions, either directly or indirectly will not have a significant impact on the environment.
- The project will not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

#### **SOUTH COAST AIR BASIN**

The project site is located in the SCAB (South Coast Air Basin) within the jurisdiction of SCAQMD. The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. The SCAQMD has jurisdiction over an area of approximately 10,743 square miles, consisting of the four-county Basin (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino Counties), and the Riverside County portions of the Salton Sea Air Basin and Mojave Desert Air Basin.

The Basin is bound by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Los Angeles County portion of the Mojave Desert Air Basin is bound by the San Gabriel Mountains to the south and west, the Los Angeles / Kern County border to the north, and the Los Angeles / San Bernardino County border to the east. The Riverside County portion of the Salton Sea Air Basin is bound by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. The federal non-attainment area (known as the Coachella Valley Planning Area) is a subregion of the Riverside County and Salton Sea Air Basin that is bound by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east.

**Figure 1: South Coast Air Quality Management District**



### **WIND PATTERNS**

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the Basin is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Anas" each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over Southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Because of the City of Bradbury's location, air quality is generally good, as many pollutants are carried inland by daytime on-shore winds, which tend to be stronger than nighttime drainage flows.

Mr. Dave Meyer  
LDM Associates  
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The prevailing winds in the project area move predominately from the south and southwest with an average wind speed of 1.27 m/s. A Windrose exhibit is available for review as presented in Figure 2 of this report and shows prevailing wind patterns and average speed in the Bradbury area. The nearest available meteorological data in the project vicinity was obtained from the Pasadena monitoring site and is used to be representative of the project area. The meteorological data was available for use by the SCAQMD on their website (<http://www.aqmd.gov/smog/metdata/MetDataTable1.html>).

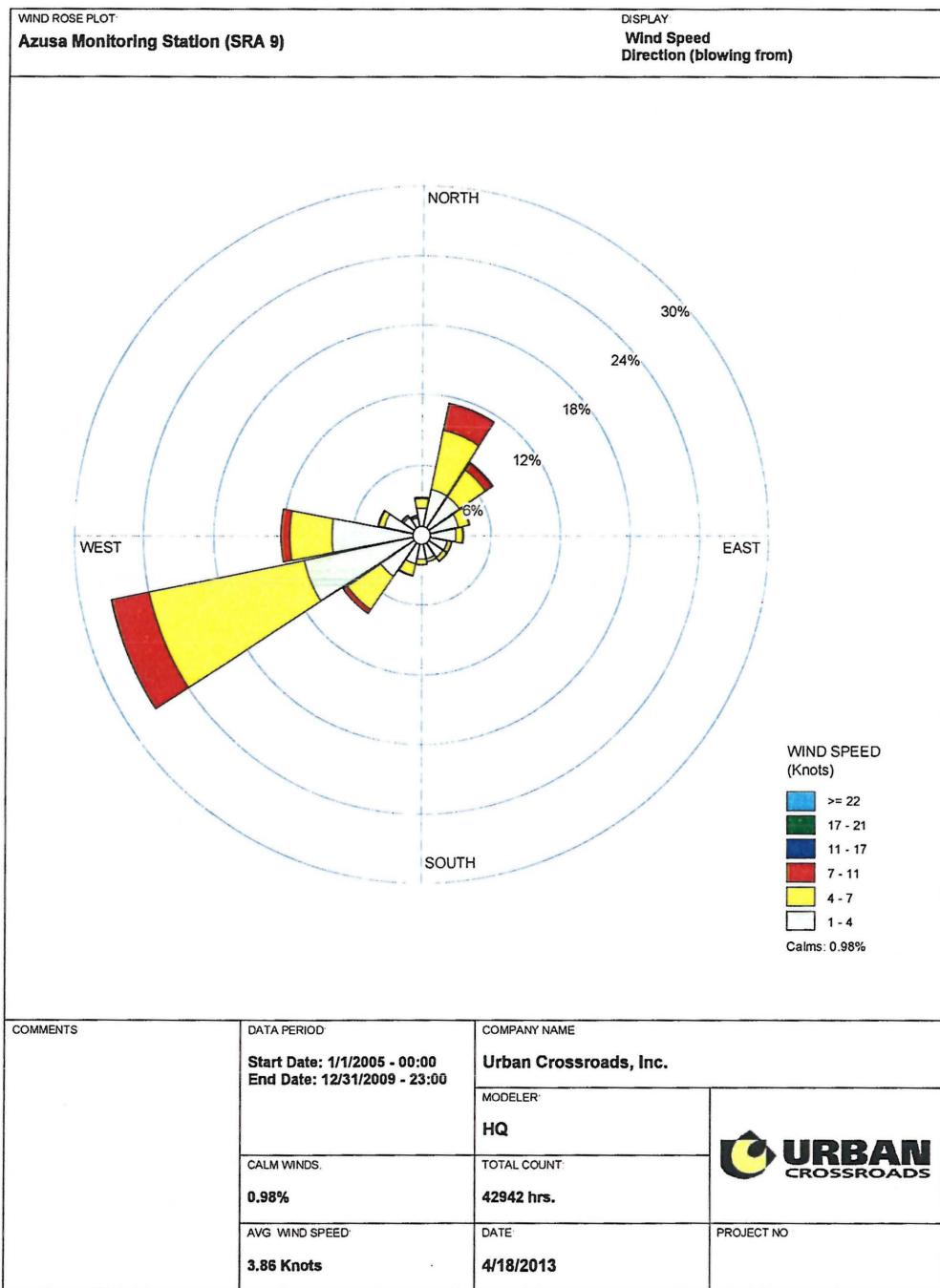
### **TEMPERATURE INVERSIONS**

In the Basin, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire Basin. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level.

A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter, when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as NO<sub>x</sub> and CO from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline.

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**Figure 2**  
**Wind Rose Exhibit**



### **AMBIENT AIR QUALITY STANDARDS**

Existing air quality is measured based upon ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. Those standards currently in effect for both California and federal air quality are shown in Table 2.

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards presented in Table 2. The air quality in a region is considered to be in attainment if the measured ambient air pollutant levels for O<sub>3</sub>, CO, SO<sub>2</sub> (1-hour and 24-hour), NO<sub>2</sub>, and PM<sub>10</sub> are not exceeded and all other standards are not equaled or exceeded at any time in any consecutive three-year period; and the federal standards (other than O<sub>3</sub>, PM<sub>10</sub>, and those based on annual averages or arithmetic mean) are not exceeded more than once per year. The O<sub>3</sub> standard is attained when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard.

For PM<sub>10</sub>, the 24-hour standard is attained when 99 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. See Table 3 for attainment designations for the project area.

### **AIR POLLUTANT MONITORING AND DESCRIPTION OF POLLUTANTS**

The nearest long-term air quality monitoring for Ozone (O<sub>3</sub>), Carbon Monoxide, Nitrogen Dioxide (NO<sub>2</sub>) is carried out by the SCAQMD at the East San Gabriel Valley #2 (SRA 9) monitoring station. Data for Inhalable Particulates (PM<sub>10</sub>) and Ultra-Fine Particulates (PM<sub>2.5</sub>) is not monitored at the East San Gabriel Valley #2 (SRA 9) monitoring station and was therefore obtained from the next nearest monitoring site that records this data at the East San Gabriel Valley #1 (SRA 9) Monitoring site. Data for sulfur dioxide (SO<sub>2</sub>) has been omitted from this analysis as attainment is regularly met in the SCAB and few monitoring stations measure SO<sub>2</sub> concentrations. The 3 years of data in Table 4 shows the number of days standards were exceeded for the study area.

TABLE 2 (PAGE 1 OF 2)

Ambient Air Quality Standards									
Pollutant	Averaging Time	California Standards <sup>1</sup>		National Standards <sup>2</sup>					
		Concentration <sup>3</sup>	Method <sup>4</sup>	Primary <sup>3,5</sup>	Secondary <sup>3,6</sup>	Method <sup>7</sup>			
Ozone (O <sub>3</sub> )	1 Hour	0.09 ppm (180 µg/m <sup>3</sup> )	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry			
	8 Hour	0.070 ppm (137 µg/m <sup>3</sup> )		0.075 ppm (147 µg/m <sup>3</sup> )					
Respirable Particulate Matter (PM10)	24 Hour	50 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	150 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis			
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>		—					
Fine Particulate Matter (PM2.5)	24 Hour	—	Gravimetric or Beta Attenuation	35 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis			
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>		12 µg/m <sup>3</sup>					
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m <sup>3</sup> )	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m <sup>3</sup> )	—	Non-Dispersive Infrared Photometry (NDIR)			
	8 Hour	9.0 ppm (10 mg/m <sup>3</sup> )		9 ppm (10 mg/m <sup>3</sup> )	—				
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m <sup>3</sup> )		—	—				
Nitrogen Dioxide (NO <sub>2</sub> ) <sup>8</sup>	1 Hour	0.18 ppm (339 µg/m <sup>3</sup> )	Gas Phase Chemiluminescence	100 ppb (188 µg/m <sup>3</sup> )	—	Gas Phase Chemiluminescence			
	Annual Arithmetic Mean	0.030 ppm (57 µg/m <sup>3</sup> )		0.053 ppm (100 µg/m <sup>3</sup> )	Same as Primary Standard				
Sulfur Dioxide (SO <sub>2</sub> ) <sup>9</sup>	1 Hour	0.25 ppm (655 µg/m <sup>3</sup> )	Ultraviolet Fluorescence	75 ppb (196 µg/m <sup>3</sup> )	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)			
	3 Hour	—		—	0.5 ppm (1300 µg/m <sup>3</sup> )				
	24 Hour	0.04 ppm (105 µg/m <sup>3</sup> )		0.14 ppm (for certain areas) <sup>10</sup>	—				
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) <sup>10</sup>	—				
Lead <sup>10,11</sup>	30 Day Average	1.5 µg/m <sup>3</sup>	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption			
	Calendar Quarter	—		1.5 µg/m <sup>3</sup> (for certain areas) <sup>11</sup>	Same as Primary Standard				
	Rolling 3-Month Average	—		0.15 µg/m <sup>3</sup>					
Visibility Reducing Particles <sup>12</sup>	8 Hour	See footnote 12	Beta Attenuation and Transmittance through Filter Tape	No National Standards					
Sulfates	24 Hour	25 µg/m <sup>3</sup>	Ion Chromatography						
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m <sup>3</sup> )	Ultraviolet Fluorescence						
Vinyl Chloride <sup>10</sup>	24 Hour	0.01 ppm (26 µg/m <sup>3</sup> )	Gas Chromatography						

See footnotes on next page ...

**TABLE 2 FOOTNOTES (PAGE 2 OF 2)**

- 1 California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- 2 National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above  $150 \mu\text{g}/\text{m}^3$  is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
- 3 Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr. ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- 4 Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
- 5 National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- 6 National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- 7 Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
- 8 To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- 9 On June 2, 2010, a new 1-hour SO<sub>2</sub> standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO<sub>2</sub> national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.  
Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
- 10 The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- 11 The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard ( $1.5 \mu\text{g}/\text{m}^3$  as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- 12 In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

**TABLE 3**  
**ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SOUTH COAST AIR BASIN (SCAB)**

Criteria Pollutant	State Designation	Federal Designation
Ozone - 1 hour standard	Nonattainment	No Standard
Ozone - 8 hour standard	Nonattainment	Extreme Nonattainment
PM <sub>10</sub>	Nonattainment	Serious Nonattainment
PM <sub>2.5</sub>	Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Attainment/Maintenance
Nitrogen Dioxide	Nonattainment	Attainment/Maintenance
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment/Nonattainment <sup>4</sup>	Attainment/Nonattainment
All others	Attainment/Unclassified	Attainment/Unclassified

Source: California Air Resources Board 2012 (<http://www.arb.ca.gov/desig/desig.htm>, <http://www.arb.ca.gov/desig/feddesig.htm>)

<sup>4</sup> The Los Angeles County portion of the SCAB is classified as nonattainment; the remainder of the SCAB is in attainment of the State Standard.

**TABLE 4**  
**PROJECT AREA AIR QUALITY MONITORING SUMMARY 2010-2012**  
**EAST SAN GABRIEL VALLEY #2 AND EAST SAN GABRIEL VALLEY #1 (SRA 9) AIR**  
**MONITORING STATION DATA<sup>a</sup>**

POLLUTANT	STANDARD	YEAR		
		2010	2011	2012
Ozone (O <sub>3</sub> )				
Maximum 1-Hour Concentration (ppm)		0.124	0.134	0.147
Maximum 8-Hour Concentration (ppm)		0.099	0.111	0.111
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	25	35	45
Number of Days Exceeding State 8-Hour Standard	> 0.07 ppm	48	40	59
Number of Days Exceeding Federal 8-Hour Standard	> 0.075 ppm	20	30	45
Number of Days Exceeding Health Advisory	≥ 0.15 ppm	0	0	0
Carbon Monoxide (CO)				
Maximum 1-Hour Concentration (ppm)		2.0	1.4	1.3
Maximum 8-Hour Concentration (ppm)		1.3	1.1	1.1
Number of Days Exceeding State 1-Hour Standard	> 20 ppm	0	0	0
Number of Days Exceeding Federal / State 8-Hour Standard	> 9.0 ppm	0	0	0
Number of Days Exceeding Federal 1-Hour Standard	> 35 ppm	0	0	0
Nitrogen Dioxide (NO <sub>2</sub> )				
Maximum 1-Hour Concentration (ppm)		0.0785	0.0776	0.060
Annual Arithmetic Mean Concentration (ppm)		0.0154	0.0129	--
Number of Days Exceeding State 1-Hour Standard	> 0.25 ppm <sup>b</sup>	0	0	0
Number of Days Exceeding State 1-Hour Standard	> 0.18 ppm	0	0	0
Inhalable Particulates (PM <sub>10</sub> )				
Maximum 24-Hour Concentration (µg/m <sup>3</sup> )		70	65	78
Number of Samples		55	61	61
Number of Samples Exceeding State Standard	> 50 µg/m <sup>3</sup>	5	9	36
Number of Samples Exceeding Federal Standard	> 150 µg/m <sup>3</sup>	0	0	0
Ultra-Fine Particulates (PM <sub>2.5</sub> )				
Maximum 24-Hour Concentration (µg/m <sup>3</sup> )		44.4	49.5	39.6
Number of Samples		93	118	118
Annual Arithmetic Mean (µg/m <sup>3</sup> )		10.9	11.4	11
Number of Samples Exceeding Federal 24-Hour Standard	> 35 µg/m <sup>3</sup>	1	1	--

<sup>a</sup> East San Gabriel Valley #2 (SRA 9) Monitoring Station utilized for all pollutants except PM10, and PM2.5.

Source: South Coast Air Quality Management District (SCAQMD) ([www.aqmd.gov](http://www.aqmd.gov)) (<http://www.epa.gov/airdata/>)

Examples of sources and effects of these pollutants are identified below:

- Carbon Monoxide (CO): Carbon monoxide is a colorless, odorless, tasteless and toxic gas resulting from the incomplete combustion of fossil fuels. CO interferes with the blood's ability to carry oxygen to the body's tissues and results in numerous adverse health effects. CO is a criteria air pollutant.
- Oxides of Sulfur (SO<sub>x</sub>): Typically strong smelling, colorless gases that are formed by the combustion of fossil fuels. SO<sub>2</sub> and other sulfur oxides contribute to the problem of acid deposition. SO<sub>2</sub> is a criteria pollutant.
- Nitrogen Oxides (Oxides of Nitrogen, or NO<sub>x</sub>): Nitrogen oxides (NO<sub>x</sub>) consist of nitric oxide (NO), nitrogen dioxide (NO<sub>2</sub>) and nitrous oxide (N<sub>2</sub>O) and are formed when nitrogen (N<sub>2</sub>) combines with oxygen (O<sub>2</sub>). Their lifespan in the atmosphere ranges from one to seven days for nitric oxide and nitrogen dioxide, to 170 years for nitrous oxide. The lifespan of these pollutants refers to the amount of time they are stable in the atmosphere and can react with other pollutants; once the particles become unstable they are "removed" from the atmosphere through processes of rain, snow, and deposition to the ground. Nitrogen oxides are typically created during combustion processes, and are major contributors to smog formation and acid deposition. NO<sub>2</sub> is a criteria air pollutant, and may result in numerous adverse health effects; it absorbs blue light, resulting in a brownish-red cast to the atmosphere and reduced visibility.
- Ozone (O<sub>3</sub>): A strong smelling, pale blue, reactive toxic chemical gas consisting of three oxygen atoms. It is a product of the photochemical process involving the sun's energy. Ozone exists in the upper atmosphere ozone layer as well as at the earth's surface. Ozone at the earth's surface causes numerous adverse health affects and is a criteria air pollutant. It is a major component of smog.
- Particulate Matter less than 10 microns (PM<sub>10</sub>): A major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. The size of

the particles (10 microns or smaller, about 0.0004 inches or less) allows them to easily enter the lungs where they may be deposited, resulting in adverse health effects. PM<sub>10</sub> also causes visibility reduction and is a criteria air pollutant.

- Particulate Matter less than 2.5 microns (PM<sub>2.5</sub>): A similar air pollutant consisting of tiny solid or liquid particles which are 2.5 microns or smaller (which is often referred to as fine particles). These particles are formed in the atmosphere from primary gaseous emissions that include sulfates formed from sulfur dioxide release from power plants and industrial facilities and nitrates that are formed from NOx release from power plants, automobiles and other types of combustion sources. The chemical composition of fine particles highly depends on location, time of year, and weather conditions.
- Reactive Organic Gases (ROGs): ROGs, also known as reactive organic compounds (ROCs) and volatile organic compounds (VOCs), consist of non-methane hydrocarbons and oxygenated hydrocarbons. Hydrocarbons are organic compounds that contain only hydrogen and carbon atoms. Non-methane hydrocarbons are hydrocarbons that do not contain methane.

### **REGULATORY SETTING**

The U.S. Environmental Protection Agency (EPA) is responsible for setting and enforcing the National Ambient Air Quality Standards (NAAQS) for oxidants (O<sub>3</sub>), CO, NO<sub>x</sub>, SO<sub>2</sub>, PM<sub>10</sub>, and lead. The U.S. EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The U.S. EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of the CARB.

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). As discussed above, the CAA establishes the Federal Air Quality Standards, the NAAQS, and specifies future dates for achieving compliance. The CAA also mandates that States submit and implement State

Implementation Plans (SIPs) for local areas not meeting these standards. These Plans must include pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions).

Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O<sub>3</sub>, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, CO, PM<sub>2.5</sub>, and lead. The NAAQS were amended in July 1997 to include an additional standard for O<sub>3</sub> and to adopt a NAAQS for PM<sub>2.5</sub>.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and nitrogen oxides (NO<sub>x</sub>). NO<sub>x</sub> is a collective term that includes all forms of nitrogen oxides (NO, NO<sub>2</sub>, NO<sub>3</sub>) which are emitted as byproducts of the combustion process.

The CARB, which became part of the California EPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. The California CAA mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date. The CARB established the CAAQS for all pollutants for which the Federal government has NAAQS and, in addition, establishes standards for sulfates, visibility, hydrogen sulfide, and vinyl chloride. However at this time, hydrogen sulfide and vinyl chloride are not measured at any monitoring stations in the Basin because they are not considered to be a regional air quality problem. It should also be noted that the CAAQS are generally more stringent than the NAAQS.

Local air quality management districts, such as the SCAQMD, regulate air emissions from commercial and light industrial facilities. All air pollution control districts have been formally designated as attainment or non-attainment for each CAAQS.

Under the 1977 Federal Clean Air Act, areas that are not in compliance with national clean air standards are required to prepare air quality management plans that include specified emission reduction strategies in an effort to meet these goals.

### **LOCAL PLANS, POLICIES, REGULATIONS, AND LAWS**

#### **South Coast Air Quality Management District**

The SCAQMD attains and maintains air quality conditions in the Basin through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of the SCAQMD includes the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, and issuance of permits for stationary sources of air pollution. The SCAQMD also inspects stationary sources of air pollution and responds to citizen complaints; monitors ambient air quality and meteorological conditions; and implements programs and regulations required by the CAA, CAAA, and the CCAA. Air quality plans applicable to the proposed project are discussed below.

#### **Air Quality Management Plan**

The SCAQMD, with input from the Southern California Association of Governments (SCAG), is responsible for preparing the air quality management plan (AQMP), which addresses federal and state CAA requirements. The AQMP details goals, policies, and programs for improving air quality in the Basin.

The Project site is located within the SCAB, which is characterized by relatively poor air quality. The SCAQMD has jurisdiction over an approximately 12,000 square-mile area consisting of the four-county Basin and the Los Angeles County and Riverside County portions of what used to be referred to as the Southeast Desert Air Basin. In these areas, the SCAQMD is principally responsible for air pollution control, and works directly with the Southern California Association of

Governments (SCAG), county transportation commissions, local governments, as well as state and federal agencies to reduce emissions from stationary, mobile, and indirect sources to meet state and federal ambient air quality standards.

Currently, these state and federal air quality standards are exceeded in most parts of the Basin. In response, the SCAQMD has adopted a series of Air Quality Management Plans (AQMPs) to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy.

The Final 2012 AQMP was adopted by the AQMD Governing Board on December 7, 2012. The 2012 AQMP incorporates the latest scientific and technological information and planning assumptions, including the 2012 Regional Transportation Plan/Sustainable Communities Strategy and updated emission inventory methodologies for various source categories.

Similar to the 2007 AQMP, the 2012 AQMP was based on assumptions provided by both CARB and SCAG in the latest available EMFAC model for the most recent motor vehicle and demographics information, respectively. The air quality levels projected in the 2012 AQMP are based on several assumptions. For example, the 2012 AQMP has assumed that development associated with general plans, specific plans, residential projects, and wastewater facilities will be constructed in accordance with population growth projections identified by SCAG in its 2012 RTP. The 2012 AQMP also has assumed that such development projects will implement strategies to reduce emissions generated during the construction and operational phases of development.

### **SCAQMD Rules and Regulations**

All projects are subject to SCAQMD rules and regulations in effect at the time of construction. Specific rules applicable to the construction of the proposed project may include, but are not limited to:

**Rule 401 – Visible Emissions.** A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines.