

| TABLE ES-1: SUMMARY OF THE 2012-2035 RTP/SCS IMPACTS | | |
|--|---|--------------------------------------|
| Impact | Mitigation Measures | Significance After Mitigation |
| cases potentially resulting in slope failure. | MM-GEO6: Project sponsors can and should ensure that, prior to preparing project designs, new and abandoned wells are identified within construction areas to ensure the stability of nearby soils. | |
| Potential to be located on expansive soils, a geologic unit or soil that is unstable, or that would become unstable as a result of the Plan, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. | <p>MM-GEO7: Project sponsors can and should ensure that projects avoid geologic units or soils that are unstable, expansive soils and soils prone to lateral spreading, subsidence, liquefaction, or collapse wherever feasible.</p> <p>MM-GEO8: Project sponsors can and should ensure that projects avoid landslide areas and potentially unstable slopes wherever feasible.</p> <p>MM-GEO9: Project sponsors can and should ensure that site-specific geotechnical investigations conducted by a qualified geotechnical expert should be required prior to preparation of project designs to identify the potential for subsidence and expansive soils. These investigations would identify areas of potential failure and recommend remedial geotechnical measures to eliminate any problems. Recommended corrective measures, such as structural reinforcement and replacing soil with engineered fill, should be implemented in project designs.</p> <p>MM-GEO10: SCAG shall minimize future impacts to geological resources through cooperation, information sharing, and regional program development as part of SCAG's ongoing regional planning efforts, such as web-based planning tools for local government including CA Lots, and direct technical assistance efforts such as Compass Blueprint's Toolbox Tuesday series. Resource agencies, such as the U.S. Geology Survey, should be consulted during this update process.</p> | Significant and Unavoidable |
| Potential to result in the loss of availability of known aggregate and mineral resources that would be of value to the region and residents of the State. | <p>MM-GEO11: SCAG shall coordinate with the Department of Conservation, California Geological Survey to maintain a database of 1) available resources in the SCAG region including permitted and un-permitted and 2) the anticipated 50-year demand. Based on the results of this survey SCAG should work with local agencies to develop an appropriate response to the anticipated demand, including identifying future sites that should seek permitting and working with industry experts to identify ways to encourage and increase recycling to reduce the demand for aggregate.</p> <p>MM-GEO12: Local jurisdictions can and should review availability of aggregate and mineral resources in their jurisdiction and should develop a long-range plan to meet demand.</p> | Significant and Unavoidable |
| Potential to contribute to a cumulatively considerable increase in risk associated with geologic hazards and impacts to mineral resources. | MM-GEO1 through MM-GEO12 would address cumulative impacts. | Significant and Unavoidable. |
| GREENHOUSE GAS EMISSIONS | | |
| Under the Plan, GHG emissions from | <p>Mitigation measures under Air Quality, Land Use and Transportation would also reduce GHGs.</p> <p>MM-GHG1: SCAG shall update any future Regional Transportation Plans/Sustainable Community Plans and Regional</p> | Significant and |

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| | <p>MM-HM15: If lead-based paint is present, project sponsors can and should submit specifications to the appropriate agency, signed by a certified Lead Supervisor, Project Monitor, or Project Designer for the stabilization and/or removal of the identified lead paint in accordance with all applicable laws and regulations, including but not necessarily limited to: California Occupational Safety and Health Administration's (Cal OSHA's) Construction Lead Standard, Title 8 California Code of Regulations (CCR) Section 1532.1 and Department of Health Services (DHS) Regulation 17 CCR Sections 35001-36100, as may be amended. If other materials classified as hazardous waste by State or federal law are present, the project sponsor should submit written confirmation to the appropriate local agency that all State and federal laws and regulations should be followed when profiling, handling, treating, transporting and/or disposing of such materials.</p> <p>MM-HM16: If materials classified as hazardous waste by State or federal law are present, project sponsors can and should submit written confirmation to appropriate local agency that all State and federal laws and regulations should be followed when profiling, handling, treating, transporting and/or disposing of such materials</p> | |
| Potential to contribute a cumulatively significant increase in risk associated with hazardous materials transport outside of the SCAG region. | MM-HM1 through MM-HM4 would address this impact. | Significant and Unavoidable |
| LAND USE AND AGRICULTURE RESOURCES | | |
| Potential to result in inconsistencies with currently applicable adopted local land use plans and policies. | <p>MM-LU1: SCAG shall encourage cities and counties in the region to provide SCAG with electronic versions of their most recent general plan (and associated environmental document) and any updates as they are produced.</p> <p>MM-LU2: SCAG shall encourage, through regional policy comments, that cities and counties update their general plans at least every ten years, as recommended by the Governor's Office of Planning and Research.</p> <p>MM-LU3: SCAG shall work with its member cities and counties to ensure that transportation projects and growth are consistent with the RTP and general plans.</p> <p>MM-LU4: SCAG shall coordinate with member cities and counties to encourage that general plans reflect RTP/SCS policies and strategies. SCAG will work to build consensus on how to address inconsistencies between general plans and RTP/SCS policies.</p> <p>MM-LU5: SCAG shall provide technical assistance and regional leadership to implement the RTP/SCS goals and strategies and integrate growth and land use planning with the existing and planned transportation network.</p> <p>MM-LU6: SCAG shall provide planning services to local jurisdictions through Compass Blueprint Demonstration Projects. These projects will help local jurisdictions:</p> <ul style="list-style-type: none"> • Update General Plans to reflect Compass Blueprint principles and integrate land use and transportation planning. • Develop specific plans, zoning overlays and other planning tools to enable and stimulate desired land use changes that are consistent with the future land development pattern in the 2012-2035 RTP/SCS | Significant and Unavoidable |

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| | <ul style="list-style-type: none"> Complete the economic analysis and community involvement efforts that will ensure that the planned changes are market feasible and responsible to stakeholder concerns. Visualize potential changes, through innovative graphics and mapping technology to inform the dialogue about growth, development and transportation at the local and regional level. <p>MM-LU7: SCAG shall continue with a targeted public relations strategy that emphasizes regional leadership, the benefits and implications of Compass Blueprint principles and sustainable growth, and builds a sense of common interests among Southern Californians.</p> <p>MM-LU8: SCAG shall use its Intergovernmental Review Process to provide review and comment on large development projects regarding their consistency with the RTP and other regional planning efforts.</p> <p>MM-LU9: SCAG shall develop and implement coordinated mitigation programs for regional projects, with an emphasis on regional transportation projects.</p> <p>MM-LU10: Local jurisdictions can and should provide for new housing consistent with the regional Housing Needs Assessment (RHNA) to accommodate their share of the forecasted regional growth.</p> | |
| Potential to disrupt or divide established communities. | <p>MM-LU11: Significant adverse impacts to community cohesion resulting from the displacement of residences or businesses can and should be mitigated with specific relocation measures as dictated by local, state or federal requirements on a project-by project basis. Such measures include assistance in finding a new location, assistance with moving, or compensation for losses. Where it has been determined that displacement is necessary and displaced individuals are eligible, a relocation assistance program consistent with the State Uniform Location Assistance and Real Properties Acquisition Policies Act provides compensation and assistance in finding new residence for displaced individuals.</p> <p>MM-LU12: Project sponsors can and should design new transportation facilities that consider access to existing community facilities. During the design phase of the project, community amenities and facilities can and should be identified and considered in the design of the project.</p> <p>MM-LU13: Project sponsors can and should design roadway improvements that minimize barriers to pedestrians and bicyclists. During the design phase, pedestrian and bicycle routes should be determined that permit connections to nearby community facilities.</p> | Significant and Unavoidable |
| Potential to result in substantial disturbance and/or loss of forestlands, prime farmlands and/or grazing lands, throughout the six-county SCAG region. | <p>MM-LU14: For projects that require approval or funding by the USDOT, project sponsors can and should comply with Section 4(f) U.S. Department of Transportation Act of 1966 (USDOT Act).</p> <p>MM-LU15: Project sponsors can and should ensure that at least one acre of unprotected open space is permanently conserved for each acre of open space developed as a result of transportation projects/improvements.</p> <p>MM-LU16: Local jurisdictions can and should seek funding to prepare specific plans and related environmental documents to facilitate mixed-use development at selected sites, and to allow these areas to serve as receiver sites for transfer of development rights away from environmentally sensitive lands and rural areas outside established urban growth boundaries.</p> <p>MM-LU17: Local jurisdictions can and should preserve and create open space and parks. Preserve existing trees, and plant</p> | Significant and Unavoidable |

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| | <p>replacement trees at a set ratio.</p> <p>MM-LU18: Project sponsors can and should consider corridor realignment, buffer zones and setbacks, and berms and fencing where feasible, to avoid agricultural lands and to reduce conflicts between transportation uses and agricultural lands.</p> <p>MM-LU19: Prior to final approval of each project and when feasible and prudent, the project sponsor can and should establish conservation easement programs to mitigate impacts to prime farmland.</p> <p>MM-LU20: Prior to final approval of each project, the project sponsor can and should to the extent practical and feasible, avoid impacts to prime farmlands or farmlands that support crops considered valuable to the local or regional economy.</p> <p>MM-LU21: SCAG shall use its intergovernmental review (IGR) process to review projects with potentially significant impacts to important farmlands and recommend impact avoidance and mitigation measures.</p> <p>MM-LU22: SCAG shall work with member agencies and the region's farmland interests to develop regional guidelines for buffering farmland from urban encroachment, resolving conflicts that prevent farming on hillsides and other designated areas, and closing loopholes that allow conversion of non-farm uses without a grading permit.</p> <p>MM-LU23: Local jurisdictions can and should establish programs to direct growth to less agriculturally valuable lands and ensure, where possible, the continued protection of the most agriculturally valuable land within each county. The following are offered as examples of programs:</p> <ul style="list-style-type: none"> • The development or participation in transfer of development rights programs to encourage the preservation of agricultural lands. • Tools for the preservation of agricultural lands such as eliminating estates and ranchettes and clustering to retain productive agricultural land. • Easing restrictions on farmer's markets and encourage cooperative farming initiatives to increase the availability of locally grown food. • Considering partnering with school districts to develop farm-to-school programs. <p>MM-LU24: Local jurisdictions can and should avoid the premature conversion of farmlands by promoting infill development and the continuation of agricultural uses until urban development is imminent; if development of agricultural lands is necessary, growth can and should be directed to those lands on which the continued viability of agricultural production has been compromised by surrounding urban development on the loss of local markets.</p> <p>MM-LU25: Local jurisdictions can and should encourage patterns of urban development and land use, which reduce costs on infrastructure and make better use of existing facilities. Strategies local jurisdictions can and should pursue include:</p> <ul style="list-style-type: none"> • Increase the accessibility to natural areas lands for outdoor recreation. • Promote infill development and redevelopment to revitalize existing communities • Utilize "green" development techniques • Promote water-efficient land use and development. <p>MM-LU26: Project sponsors and local jurisdictions can and should promote infill development and redevelopment to encourage the efficient use of land and minimize the development of agricultural and open space lands.</p> <p>MM-LU27: Local jurisdictions can and should consider the following land use principles that use resources efficiently, and to the</p> | |

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| | <p>extent practical and feasible minimize pollution and reduce waste generation:</p> <ul style="list-style-type: none"> Mixed-use residential and commercial development that is connected with public transportation and utilizes existing infrastructure. Land use and planning strategies to increase biking and walking trips. <p>MM-LU28: Individual projects must be consistent with federal, state, and local policies that preserve agricultural lands and support the economic viability of agricultural activities, as well as policies that provide compensation for property owners if preservation is not feasible.</p> <p>MM-LU29: For projects in agricultural areas, project sponsors can and should contact the California Department of Conservation and each county's Agricultural Commissioner's office to identify the location of prime farmlands and lands that support crops considered valuable to the local or regional economy. Impacts to such lands can and should be evaluated in project-specific environmental documents. The analysis can and should use the land evaluation and site assessment (LESA) analysis method (CEQA Guidelines §21095), as appropriate. The project sponsors or local jurisdictions can and should be responsible for ensuring adherence to the mitigation measures prior to construction. Mitigation measures may include conservation easements or the payment of in-lieu fees.</p> <p>MM-LU30: For those projects that require federal funding, the federal agency evaluates the effects of the action to agricultural resources using the criteria set forth in the Farmland Protection Policy Act (FPPA). The FPPA is administered by the NRCS, which determines impacts to farmland that could occur due to the proposed project. The determination is made through coordination between the federal agency proposing or supporting the project and NRCS. The assessment of potential impacts to farmland from corridor type projects, which is typical of transportation projects analyzed in this PEIR, will require completion of Form NRCS-CPA-106, Farmland Conservation Impact Rating for Corridor Type Projects. NRCS will make a determination, using set thresholds, as to whether additional project specific mitigation would be required.</p> <p>MM-LU31: Prior to final approval of each project, the project sponsor can and should encourage enrollments of agricultural lands for counties that have Williamson Act programs, where applicable.</p> <p>MM-LU32: SCAG shall support policies that preserve and promote the productivity and viability of agricultural lands, including promoting the availability of locally grown and organic food in the region.</p> <p>MM-LU33: Project sponsors and local jurisdictions can and should submit for IGR review projects with potentially significant impacts to important farmlands. Projects can and should include mitigation measures to reduce impacts and demonstrate project alternatives that avoid or lessen impact to agricultural lands. Mitigation can and should occur at a 1:1 ratio.</p> <p>MM-LU34: Preserve forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, groundwater recharge areas and other open space that provide carbon sequestration benefits.</p> <p>MM-LU35: Require best management practices in agriculture and animal operations to reduce emissions, conserve energy and water, and utilize alternative energy sources, including biogas, wind and solar.</p> | |
| Potential to influence the pattern of | MM-LU36: Local jurisdictions can and should encourage patterns of urban development and land use, which reduce costs on | Significant and |

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| urbanization in the region such that land use incompatibilities could occur. | <p>infrastructure and make better use of existing facilities.</p> <p>MM-LU37: SCAG's Compass Blueprint program and other ongoing regional planning efforts will be used to build a consensus in the region to support changes in land use to accommodate future population growth while maintaining the quality of life in the region.</p> <p>MM-LU38: Local jurisdictions can and should adopt and implement General Plan Housing Elements that accommodate the housing need identified through the RHNA process. Affordable housing can and should be provided consistent with the RHNA income category distribution adopted for each jurisdiction.</p> <p>MM-LU39: Local jurisdictions can and should consider shared regional priorities, as outlined in the Compass Blueprint, 2012-2035 RTP/SCS and other ongoing regional planning efforts, in determining their own development goals and drafting local plans.</p> <p>MM-LU40: Local jurisdictions and subregional organizations can and should encourage the cleanup and redevelopment of brownfield sites.</p> <p>MM-LU41: Local jurisdictions or agencies can and should adopt and implement a development pattern that utilizes existing infrastructure; reduces the need for new roads, utilities and other public works in new growth areas; and enhances non-automobile transportation.</p> <p>MM-LU42: Local jurisdictions or agencies can and should establish an urban growth boundary (UGB) with related ordinances or programs to limit suburban sprawl; local jurisdictions or agencies can and should restrict urban development beyond the UGB and streamline entitlement processes within the UGB for consistent projects.</p> <p>MM-LU43: Urban development can and should occur only where urban public facilities and services exist or can be reasonably made available.</p> <p>MM-LU44: The improvement and expansion of one urban public facility or service can and should not stimulate development that significantly precedes the local jurisdiction's ability to provide all other necessary urban public facilities and services at adequate levels.</p> <p>MM-LU45: Local jurisdictions can and should redirect new growth into existing city/urban reserve areas.</p> <p>MM-LU46: Local jurisdictions can and should maintain a one dwelling unit per 10-acre minimum lot size or lower density in areas outside designated urban service lines.</p> <p>MM-LU47: Local jurisdictions can and should encourage high-density, mixed-use, infill development and creative reuse of brownfield, under-utilized and/or defunct properties within the urban core.</p> <p>MM-LU48: Local jurisdictions can and should increase densities in urban core areas to support public transit.</p> <p>MM-LU49: Local jurisdictions can and should remove barriers to the development of accessory dwelling units in existing residential neighborhoods as appropriate</p> <p>MM-LU50: Local jurisdictions can and should reduce required road width standards wherever feasible to calm traffic and encourage alternative modes of transportation.</p> | Unavoidable |

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| | <p>MM-LU51: Local jurisdictions can and should reduce parking space requirements, unbundle parking from rents and charge for parking in new developments.</p> <p>MM-LU52: Local jurisdictions can and should add bicycle facilities to streets and public spaces.</p> <p>MM-LU53: SCAG shall promote infill, mixed-use, and higher density development, and provide incentives to support the creation of affordable housing in mixed use zones.</p> <p>MM-LU54: Local jurisdictions can and should plan for and create incentives for mixed-use development.</p> <p>MM-LU55: Local jurisdictions can and should identify sites suitable for mixed-use development and establish appropriate site-specific standards to accommodate the mixed uses. Site-specific standards could include:</p> <ul style="list-style-type: none"> • Increasing allowable building height or allowing height limit bonuses; • Allowing flexibility in applying development standards (such as FAR2 and lot coverage) based on the location, type, and size of the units, and the design of the development; • Allowing the residential component to be additive rather than within the established FAR for that zone, and eliminating maximum density requirements for residential uses in mixed use zones; • Allowing reduced and shared parking based on the use mix, and establishing parking maximums where sites are located within 0.25 miles of a public transit stop; • Allowing for tandem parking, shared parking and off-site parking leases; • Requiring all property owners in mixed-use areas to unbundle parking from commercial and residential leases; • Creating parking benefit districts, which invest meter revenues in pedestrian infrastructure and other public amenities; • Establishing performance pricing of street parking, so that it is expensive enough to promote frequent turnover and keep 15 percent of spaces empty at all times. <p>MM-LU56: Local jurisdictions can and should enable prototype mixed-use structures for use in neighborhood center zones that can be adapted to new uses over time with minimal internal remodeling.</p> <p>MM-LU57: Local jurisdictions can and should identify and facilitate the inclusion of complementary land uses not already present in local zoning districts, such as supermarkets, parks and recreational fields, schools in neighborhoods, and residential uses in business districts, to reduce the vehicle miles traveled and promote bicycling and walking to these uses.</p> <p>MM-LU58: Local jurisdictions can and should work with employers developing larger projects to ensure local housing opportunities for their employees, and engage employers to find ways to provide housing assistance as part of their employee benefits packages; major projects in mixed-use areas can and should include work-force housing where feasible.</p> <p>MM-LU59: Local jurisdictions can and should revise zoning ordinance(s) to allow local-serving businesses, such as childcare centers, restaurants, banks, family medical offices, drug stores, and other similar services near employment centers to minimize midday vehicle use.</p> <p>MM-LU60: Local jurisdictions can and should develop form-based community design standards to be applied to development projects and land use plans, using a comprehensive community outreach, for areas designated mixed-use.</p> <p>MM-LU61: Local jurisdictions can and should mix affordable housing units with market rate units as opposed to building</p> | |

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| | <p>segregated affordable housing developments.</p> <p>MM-LU62: Where practical and feasible, local jurisdictions can and should develop programs that enable the reuse of underutilized commercial, office and/or industrial properties for housing or mixed-use housing.</p> <p>MM-LU63: Local jurisdictions can and should ensure consistency with "smart growth" principles – mixed-use, infill, and higher density projects that provide alternatives to individual vehicle travel and promote the efficient delivery of services and goods.</p> <p>MM-LU64: Local jurisdictions can and should meet recognized "smart growth" benchmarks.</p> <p>MM-LU65: SCAG shall educate the public about the many benefits of well-designed, higher density development.</p> <p>MM-LU66: Project sponsors can and should incorporate public transit into the project's design.</p> <p>MM-LU67: Project sponsors can and should include pedestrian and bicycle facilities within projects and ensure that existing non-motorized routes are maintained and enhanced.</p> <p>MM-LU68: Local jurisdictions can and should encourage residential development in High Quality Transit Areas (HQTAs). Such development can and should include a generally a walkable transit village that has a minimum density of 20 dwelling units per acre and is within a ½ mile of a well-served transit stop, and includes transit corridors with minimum 15-minute or less service frequency during peak commute hours.</p> <p>MM-LU69: Local jurisdictions can and should promote greater linkage between land uses and transit, as well as other modes of transportation.</p> <p>MM-LU70: Local jurisdictions can and should ensure new development is designed to make public transit a viable choice for residents, including:</p> <ul style="list-style-type: none"> • Locating medium-high density development near activity centers that can be served efficiently by public transit and alternative transportation modes; • Locating medium-high density development near streets served by public transit whenever feasible; • Linking neighborhoods to bus stops by continuous sidewalks or pedestrian paths. <p>MM-LU71: Local jurisdictions can and should establish city-centered corridors, directing development to existing transportation corridors.</p> <p>MM-LU72: Local jurisdictions can and should develop form-based community design standards to be applied to development projects and land use plans, using a comprehensive community outreach program, for areas designated mixed-use</p> <p>MM-LU73: Local jurisdictions can and should locate affordable housing in transit-oriented development whenever feasible</p> <p>MM-LU74: Local jurisdictions can and should consider jobs/housing balance, to the extent practical and feasible, and encourage the development of communities where people live closer to work, bike, walk, and take transit as a substitute for personal auto travel.</p> <p>MM-LU75: SCAG and local jurisdictions shall minimize public expenditure for infrastructure and facilities to support urban type land uses in areas where public health and safety could not be guaranteed.</p> | |

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| | <p>MM-LU76: Project sponsors can and should consider community cohesion in designing projects through communities. Transit facilities should be designed to integrate with the community and encourage walking and bicycling as well as park and ride. New or widened roadways (and freeways) should be designed to minimize impacts to the extent feasible through landscaping, pedestrian furniture as appropriate. New roadways or freeways should consider feasible innovative designs such as cap parks that maintain community cohesion.</p> <p>MM-LU77: Local jurisdictions can and should promote development and preservation of neighborhood characteristics that encourage walking and bicycle riding in lieu of automobile-based travel.</p> <p>MM-LU78: Local jurisdictions can and should create and preserve distinct, identifiable neighborhoods whose characteristics support pedestrian travel, especially within, but not limited to, mixed-use and transit-oriented development areas, including:</p> <ul style="list-style-type: none"> • Designing or maintaining neighborhoods where the neighborhood center can be reached in approximately five minutes of walking; • Increasing housing densities from the perimeter to the center of the neighborhood; • Directing retail, commercial, and office space to the center of the neighborhood; • Encouraging pedestrian-only streets and/or plazas within developments, and destinations that may be reached conveniently by public transportation, walking, or bicycling; • Allowing flexible parking strategies in neighborhood activity centers to foster a pedestrian-oriented streetscape; • Providing continuous sidewalks with shade trees and landscape strips to separate pedestrians from traffic; • Encouraging neighborhood parks and recreational centers near concentrations of residential areas (preferably within one quarter mile) and include pedestrian walkways and bicycle paths that encourage non-motorized travel. <p>MM-LU79: Local jurisdictions can and should ensure pedestrian access to activities and services, especially within, but not limited to, mixed-use and transit-oriented development areas, including:</p> <ul style="list-style-type: none"> • Ensuring new development that provides pedestrian connections in as many locations as possible to adjacent development, arterial streets, thoroughfares; • Ensuring a balanced mix of housing, workplaces, shopping, recreational opportunities, and institutional uses, including mixed-use structures; • Locating schools in neighborhoods, within safe and easy walking distances of residences served; • For new development, primary entrances shall be pedestrian entrances, with automobile entrances and parking located to the rear; • Support development where automobile access to buildings does not impede pedestrian access, by consolidating driveways between buildings or developing alley access; • Street parking provided shall be utilized as a buffer between sidewalk pedestrian traffic and the automobile portion of the roadway; • Establish pedestrian and bicycle connectivity standards for new development, with block sizes between 1 and 2 acres; • For existing areas that do not meet established connectivity standards, prioritize the physical development of pedestrian connectors; | |

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| | <ul style="list-style-type: none"> Prioritizing grade-separated bicycle / pedestrian crossings where appropriate to enhance connectivity or overcome barriers such as freeways, railways and waterways. <p>MM-LU80: Local jurisdictions can and should review fee structures and other opportunities to provide financial and administrative incentives to support desired land uses, development patterns, and alternative modes of transportation.</p> <p>MM-LU81: Local jurisdictions can and should promote desired land uses by scaling developer fees based on desired criteria, for example:</p> <ul style="list-style-type: none"> Increasing or reducing fees proportionally with distance from the city center or preferred transit sites; Increasing or reducing fees based on the degree to which mixed uses are incorporated into the project; Reducing fees for creative re-use of brownfield sites; Increasing fees for the use of greenfield sites. <p>MM-LU82: Local jurisdictions can and should provide fast-track permitting and reductions in processing fees for desired projects. Local jurisdictions can and should research and implement a program of incentives for development projects that are fully consistent with the 2012-2035 RTP/SCS.</p> <p>MM-LU83: Local jurisdictions can and should provide incentive funding and/or infrastructure loans to support desired projects.</p> <p>MM-LU84: Local jurisdictions can and should give preference for infrastructure improvements that support or enhance desired land uses and projects.</p> <p>MM-LU85: Local jurisdictions can and should reduce heat gain from pavement and other hardscaping, including:</p> <ul style="list-style-type: none"> Reduce street rights-of-way and pavement widths to pre-World War II widths (typically 22 to 34 feet for local streets, and 30 to 35 feet for collector streets, curb to curb), unless landscape medians or parkway strips are allowed in the center of roadways; Reinstate the use of parkway strips to allow shading of streets by trees; Include shade trees on south- and west-facing sides of structures; Include low-water landscaping in place of hardscaping around transportation infrastructure and in parking areas; Install cool roofs, green roofs, and use cool paving for pathways, parking, and other roadway surfaces; Establish standards that provide for pervious pavement options; Remove obstacles to xeriscaping, edible landscaping and low-water landscaping. | |
| Potential to change patterns of growth beyond the SCAG region. | See Mitigation Measures MM-LU1 through MM-LU87 . | Significant and Unavoidable |
| NOISE | | |
| Grading and construction activities associated with the proposed freeway, | MM-NO1: To reduce noise impacts due to construction, project sponsors can and should require construction contractors to implement a site-specific noise reduction program, subject to the Lead Agency (or other appropriate government agency) review and approval, which includes the following measures: | Significant and Unavoidable |

04 SUSTAINABLE COMMUNITIES STRATEGY

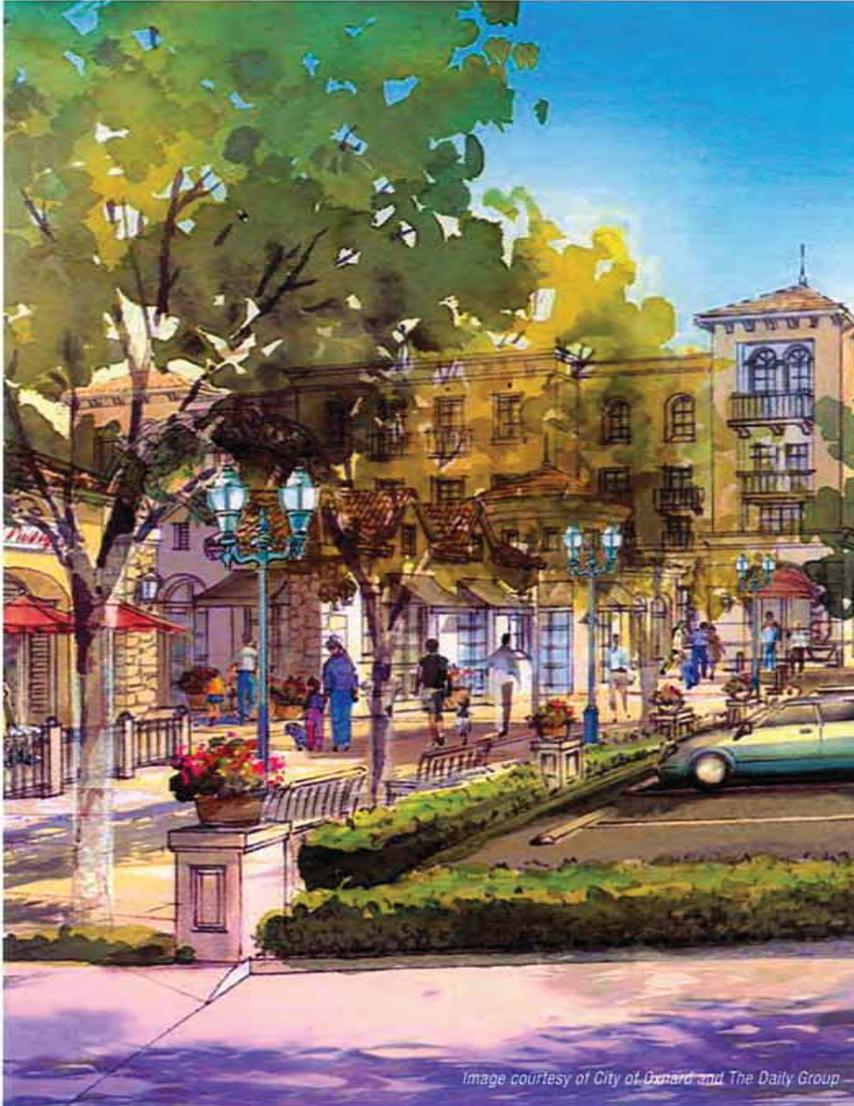


Image courtesy of City of Oxnard and The Daily Group

Southern California today faces unprecedented challenges in accommodating the additional population and economic activity expected over the next 25 years.

Once a major destination for people from other states, Southern California now sees population growth driven mostly by natural increase from within the region—births over deaths—and by international immigration. Over the last generation it has become one of the most diverse and multicultural regions in the world.

Southern California is now home to 18 million people. The region is now seen as crowded, congested, and—despite the recent downturn in the housing market—an expensive place to build a life.

While the region was once known worldwide as the “capital of sprawl,” the region today has little raw land left to accommodate additional growth. Moreover, the region has struggled in its efforts to generate real economic growth over the past two decades.

In the face of all these long-term trends, Southern California is expected to accommodate an additional 4 million people over the next 25 years, with equally significant household and employment growth (see Figure 4.1). This future growth will put additional pressure on a transportation system that is already severely congested; on communities and neighborhoods that have been in existence for many decades; and on the region’s fragile natural environment. **EXHIBITS 4.1, 4.2, and 4.3** show the geographical distribution of the region’s future growth in 2035.

Addressing these challenges successfully will require a major effort and coordination by the region’s people, its institutions, and its public agencies. These “regional players” will have to agree on a common vision for the future of the region—and then work together to make that vision a reality. With such effort, Southern California will be able to accommodate additional growth and still create an improved quality of life, a resilient economy, and a healthy natural environment.

Since 2000, the Southern California Association of Governments has worked actively with the people and institutions of Southern California to create a dynamic regional growth vision based on the following principles: *mobility, economy and sustainability*. Charged by federal law with preparing a Regional Transportation Plan every four years, SCAG has traditionally focused most on the mobility aspects of the region’s growth. Under state law, SCAG is also charged with working with its member local governments on planning for an adequate regional housing supply.

However, the recent passage of SB 375 at the state level gives SCAG a new area of responsibility—and provides the region with a renewed opportunity to focus on an integrated planning effort for the future.

The purpose of SB 375 is to implement the state’s greenhouse gas emissions (GHG) reduction goals in the sector of cars and light trucks. This mandate has been interpreted by the California Air Resources Board as a per-capita reduction in GHG emissions at two points in the future—2020 and 2035. In accordance with Govt. Code section 65080(b)(2)(B)(vii), the 2012 RTP/SCS will achieve GHG emission reductions of 8 percent per capita in 2020 and 16 percent per capita in 2035 (surpassing the 13 percent reduction target for 2035).

Because greenhouse gas emissions in the transportation sector relates closely with vehicle miles traveled (VMT), a mandated GHG reduction essentially requires SCAG to devise a regional plan and a series of strategies that will produce a per-capita reduction in VMT over the next 25 years. Under SB 375, SCAG and California’s 17 other Metropolitan Planning Organizations (MPOs) must address GHG reduction in a “Sustainable Communities Strategy” or SCS, that is part of the respective MPO’s Regional Transportation Plan.

Transportation strategies contained in the RTP—managing transportation demand and making certain transportation system improvements – are major components of the SCS. However, the SCS also focuses on the general land use growth pattern for the region, because geographical relationships between land uses—including density and intensity—help determine the need for travel in the first place.

Therefore, SCAG’s SCS includes not only projections about the transportation network but also about land use. Indeed, under SB 375, a SCS must, in summary:

- Identify existing and future land use patterns
- Consider statutory housing goals and objectives
- Identify areas to accommodate long-term housing need
- Identify areas to accommodate 8-year housing need
- Consider resource areas and farmland
- Identify transportation needs and the planned transportation network
- Set forth a future land use pattern to meet GHG emission reduction targets
- Comply with federal law for developing an RTP

These requirements, as outlined in California Government Code Section 65080(b)(2)(B), do not mean that the SCS creates a mandate for certain land use policies at the local level. In fact, SB 375 specifically states that the SCS cannot dictate local General Plan policies (see, Government Code Section 65080(b)(2)(J)). However, the SCS is intended to provide a regional policy foundation that local governments may build upon if they so choose and generally includes the quantitative growth projections from each city and county in the region going forward. In addition, some projects consistent with the SCS are eligible for streamlined environmental review.

One aspect of SB 375 that is unique to the SCAG region is that subregions within SCAG have the option of creating their own subregional SCS. Of SCAG’s 15 subregions, two accepted this option: the Gateway Cities Council of Governments (Gateway COG) and the Orange County Council of Governments (OCCOG). These subregional SCS documents are incorporated into the regional SCS.

FIGURE 4.1 Anticipated Future Growth (2035)

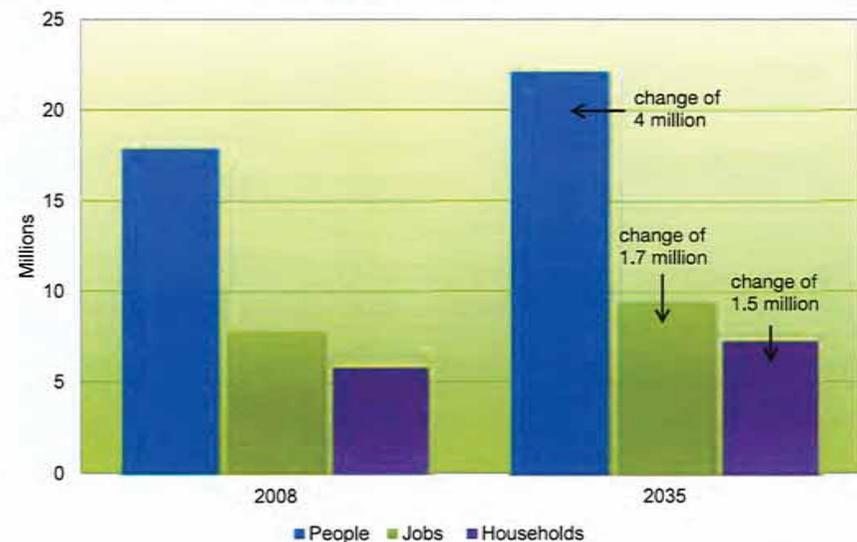


EXHIBIT 4.1 Population Growth SCAG Region (2035)

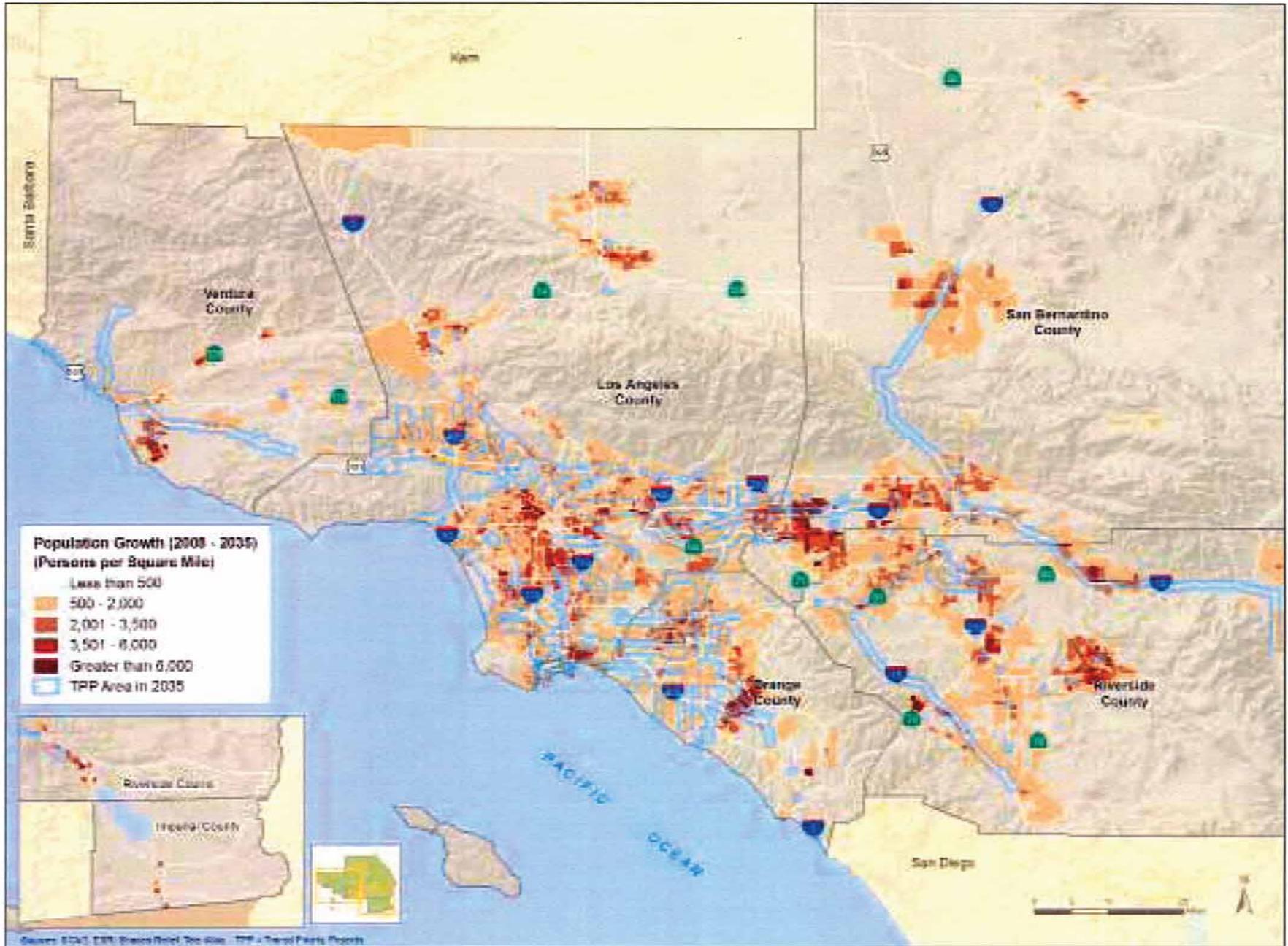


EXHIBIT 4.2 Employment Growth SCAG Region (2035)

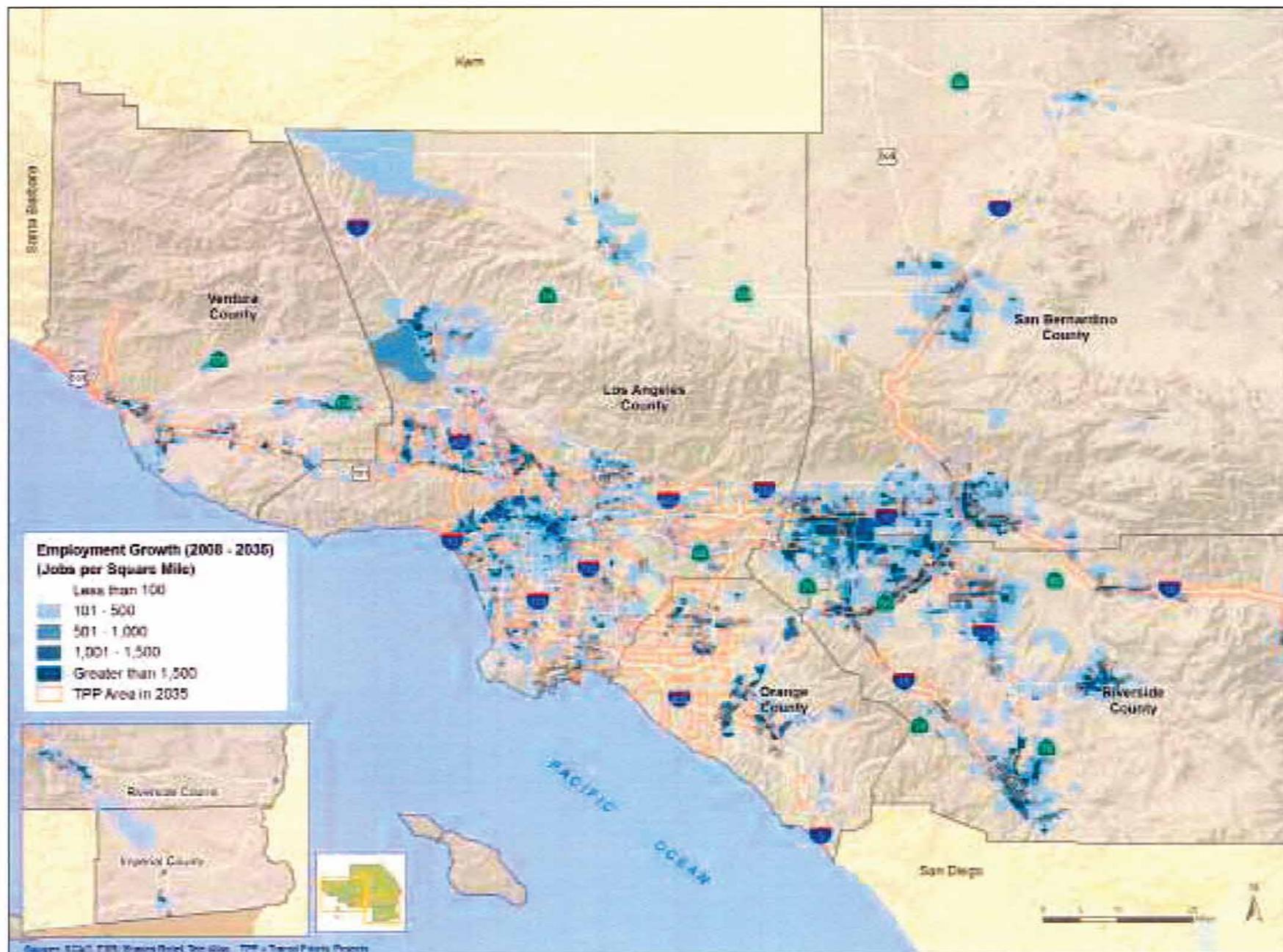
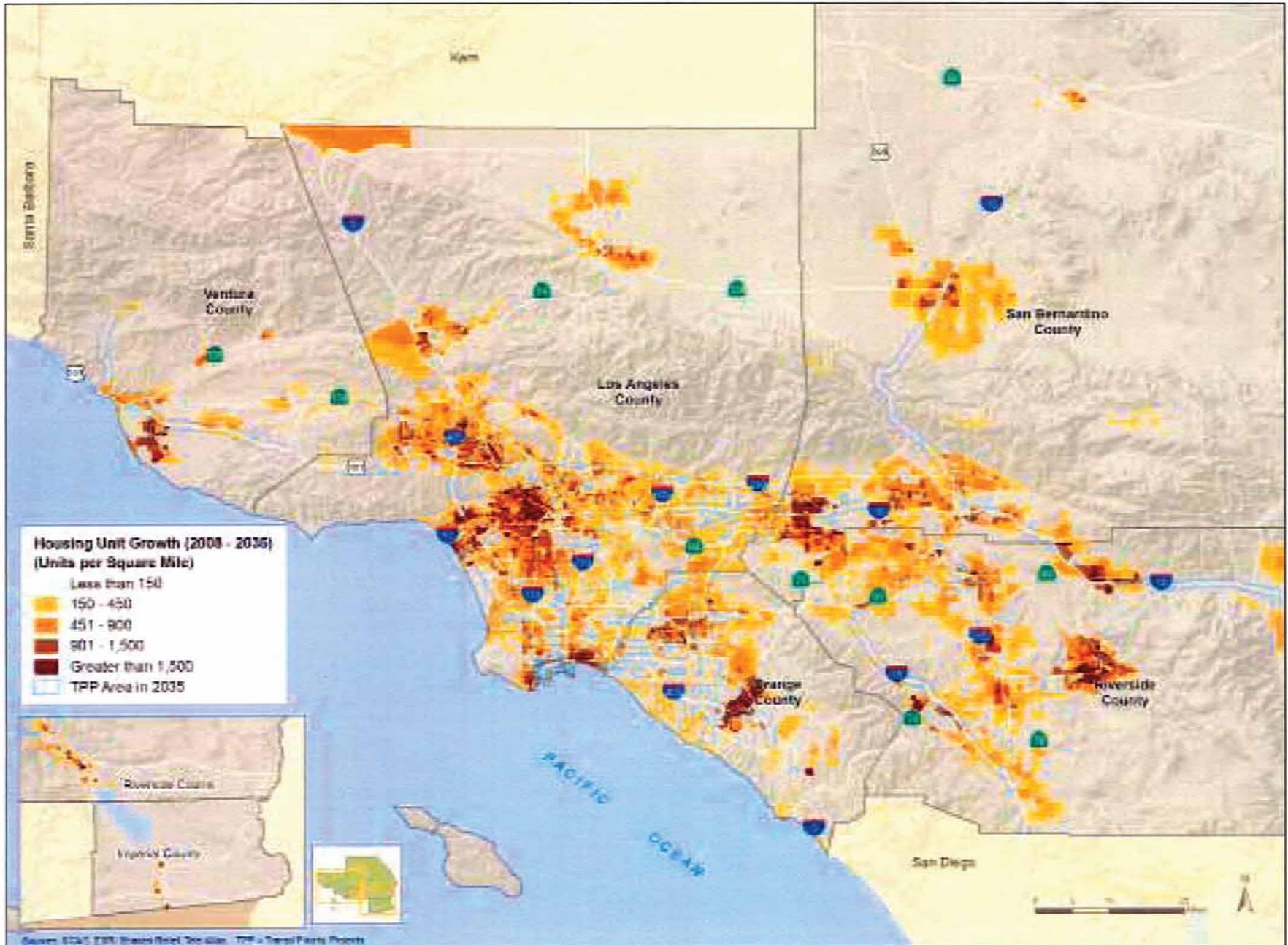


EXHIBIT 4.3 Housing Unit Growth SCAG Region (2035)



Goals and Benefits

Under SB 375, the primary goal of the SCS is to provide a vision for future growth in Southern California that will decrease per-capita greenhouse gas emissions from automobiles and light trucks. As stated above, in point of fact this means that we need to identify strategies that can reduce per-capita vehicle miles traveled over the next 25 years.

However, the strategies contained in the RTP/SCS will produce benefits for the region far beyond simply reducing GHG emissions. Because it is the latest refinement of an evolving regional blueprint that SCAG has been working on since 2000, the RTP/SCS will help the region deal with many ongoing issues across a wide range of concerns, including placemaking, the cost of living, the environment, health, responsiveness to the marketplace, and mobility.

1. Better Placemaking

As Southern California becomes more congested and crowded, the issue of creating better and more livable places to live and work has become more important. A completely car-oriented lifestyle made sense in Southern California a couple of generations ago when the region was less dense and there were few options other than driving. Indeed, Southern Californians still need their cars and value them highly, but because of traffic congestion and the hassle factor, more people today also value good “placemaking”—that is, the process of developing locations where they can live and work that include a pleasant and convenient walking environment that reduces their reliance on their car. Communities that promote walkable environments and alternative transportation create more opportunities for an active lifestyle, improve safety and accessibility for marginalized communities, and help preserve natural areas and resources. The strategies outlined in the SCS promote the development of better places to live and work through measures that encourage more compact development, varied housing options, bike and pedestrian improvements, and efficient transportation infrastructure.

2. Lower Cost to Taxpayers and Families

While attractive in many ways, the traditional suburban lifestyle is expensive both to families and taxpayers, which is one of the reasons why the cost of housing and the cost of living in Southern California are high. The cost of maintaining a large house and yard and multiple vehicles can consume most of a family’s income. The

cost of building the roads, water and sewer lines, and other infrastructure required for a low-density lifestyle is very high, and taxpayers usually wind up paying at least part of the bill, especially for ongoing maintenance. By creating more compact neighborhoods and placing everyday destinations closer to homes and closer to one another, the RTP/SCS’s strategies can reduce the burden of development to the taxpayers and reduce the everyday cost of housing and transportation for families.

3. Benefits to Public Health and the Environment

Public health and environmental protection have long been linked to the way our region is planned and the way public services are delivered. Municipal water and sewer systems, for example, ensure clean water. At the same time, concrete stormwater runoff channels harm water quality and sprawl eats into open space. Many strategies contained in the RTP/SCS will provide widespread benefits within the region for both public health and environmental protection. For example, better placemaking will allow people to use walking and bicycling more regularly in their daily lives, and promote the development of urban parks thus providing more opportunities for recreation and exercise. Reducing the footprint of new development has many benefits, including protection of farmland that provides regional food,



maintaining wildlife habitat, decreasing air pollution and improving opportunities for green stormwater solutions that will improve water quality.

4. Greater Responsiveness to Demographics and the Changing Housing Market

The traditional suburban development pattern that characterizes most of Southern California was appropriate for its time and still works well for millions of residents and homeowners. But the demographic profile of the region is changing, and as a result, the market for housing is changing as well. The number of empty-nesters (a parent whose children have grown and left home) is increasing dramatically, especially among older age groups. Already, many of these empty-nesters are looking for smaller housing and a more manageable, walkable lifestyle. Recent trends suggest that many will be looking to live near their families, their churches, and other local institutions, rather than commuting long distances. In addition, there is little question that all demographic groups will be looking for a “value lifestyle” in which both housing and transportation costs are minimized even as they maintain a high quality of life. RTP/SCS strategies focused on high-quality places, sensitive and compact infill development, and more housing and transportation choices will provide an important response to these newly emerging market forces.

5. Improved Access and Mobility

Southern California today has outgrown its traditional auto-oriented mobility system. Congestion is ever-present and it is not possible for additional road construction to solve all mobility problems in the region. Strategies contained within the RTP/SCS will help the region confront congestion and mobility issues in alternative ways. The transportation strategies contained within the Regional Transportation Plan will focus on “bang for the buck” solutions by improving critical road connections in the region and increasing public transit capacity. Land use strategies in the RTP/SCS will improve mobility and access by placing destinations closer together and decreasing the time and cost of moving between them.

It is important to note that the RTP/SCS does not envision a wholesale redevelopment of the Southern California region. The vast majority of neighborhoods and business districts that will exist in 2035 already exist today and most of them—especially residential neighborhoods—will be unchanged in the next 25 years. Rather, the RTP/SCS envisions a new development pattern for new neighborhoods and revitalized neighborhoods and business districts that will build upon the current pattern to give residents more choices and more opportunities as they consider where to live and work in the future.

Creating the RTP/SCS

The RTP/SCS contains ambitious goals to meet the region’s challenges, yet these ideas and strategies are not new. In recent years, SCAG and its local jurisdictions have laid the groundwork for the RTP/SCS by engaging in a variety of efforts to plan for more sustainable communities. In order to build on this foundation, SCAG’s first steps have been to coordinate with its local and regional partners in both information gathering and strategy development in order to create a highly realistic and implementable RTP/SCS. The “bottom-up” approach has included local jurisdictions, subregional Councils of Government (COGs), County Transportation Commissions (CTCs), air districts, and a wide array of stakeholders.

Data Collection

INTEGRATED GROWTH FORECAST

The RTP/SCS depends heavily on an accurate and credible forecast for future growth in population, housing, and employment. Beginning in summer 2009, SCAG conducted a series of one-on-one meetings with 175 cities and six counties to gain local input on the integrated population, household, and employment growth forecast for the 2012 RTP/SCS.

Over the last two years, the Integrated Growth Forecast has been updated to reflect the 2010 Census, employment data from the California Employment Development Department, and population and household data from the California Department of Finance. It also underwent an extensive peer-review process over the same two-year period. Ongoing discussions with local jurisdictions led to some additional adjustments, which resulted in SCAG’s ability to obtain a consensus over the Integrated Growth Forecast to serve as the foundation for the RTP/SCS.

LOCAL PLANNING SESSIONS

In 2011, SCAG conducted a series of planning sessions with local governments to gather all relevant land use and transportation policies, plans and data required to formulate the SCS. Using survey instruments, one-on-one discussions and Geographical Information System (GIS) software, the local governments provided up-to-date information including

growth opportunities, local land use plans and measures, transportation demand management (TDM) measures, transportation systems management (TSM) measures and other local transportation strategies. Results from these local planning sessions can be found in Appendix 16.

COUNTY TRANSPORTATION COMMISSIONS

As the agencies responsible for the implementation of transportation projects in their respective counties, SCAG's six County Transportation Commissions played an invaluable role in the development of the 2012 RTP/SCS. Early in the development process, the CTCs worked closely with SCAG to identify county priorities for consideration in the RTP/SCS's alternatives analysis process. The CTCs continued to remain actively involved throughout the entire analysis process, offering meaningful input as SCAG decision-makers considered the various policy alternatives. Furthermore, given the new requirements of SB 375, it will be critical for the CTCs to embrace the concept of integrating transportation planning with land use planning in order for this region to be able to develop a truly sustainable RTP/SCS. Fortunately, the CTCs within the SCAG region were moving in this direction long before the passage of SB 375, and served as excellent partners in the development of this RTP/SCS.

Creation of Land Use Scenarios

Once SCAG collected all relevant data and information from local governments and CTCs, the agency began developing scenarios using a process that would engage the entire region in envisioning a more sustainable future. A single framework model was used, allowing SCAG's technical staff to load the data and research-based assumptions about the future, and to test a variety of land use patterns and their transportation implications. Further details on the model can be found in Appendix 19.

Using this model, SCAG created four scenarios for the future of the region. These scenarios were designed to explore and convey two basic aspects of future growth: First, *where* the six-county SCAG region grows over the next 25 years—to what extent growth is focused within existing cities and towns; and second, *how* the region grows—the shape and style of the neighborhoods and transportation systems that will define growth over the period. These scenarios were precursors to a set of more detailed alternatives, and allowed for public dialogue and feedback, which in turn allowed SCAG to lay out

substantially more detailed and refined plan alternatives. The alternatives used in latter stages of plan development and evaluation, and for analysis in the Program Environmental Impact Report (PEIR), are separate and distinct from the scenarios discussed here.

The four scenarios vary in their land use assumptions and in the package of transportation investments that support the quality and location of growth in the scenarios. The range of the four workshop scenarios can be described by how they address the following key elements:

- Development Location (Dispersed Growth vs. Focused Development):** The four scenarios vary in the proportion of growth accommodated at the edges of cities and the region's urbanized areas versus that located in and around existing cities and towns, particularly in the region's designated High-Quality Transit Areas (HQTA). A HQTA is generally a walkable transit village or corridor, consistent with the adopted RTP/SCS, that has a minimum density of 20 dwelling units per acre and is within a ½ mile of a well-serviced transit stop with 15-minute or less service frequency during peak commute hours. This was represented by the proportion of Greenfield versus Refill (infill and redevelopment) growth in each of the scenarios.



Image courtesy of City of Irvine

- Community/Neighborhood Design (Auto-Oriented vs. Walkable):** The shape and quality of growth in the scenarios vary, from a focus on walkable and transit oriented places where most daily needs are within walking, biking, or short driving distance from homes, to new communities which are centered around the car as the dominant form of transportation for nearly all trips. This was represented across the four scenarios by the proportion of Standard Suburban, Mixed Use/Walkable, and Urban Infill development in each of the scenarios.
- Housing Options and Mix (Single Family Subdivision vs. Multi-family Focus):** The scenarios varied in future housing mix in order to depict the impacts of meeting (or not meeting) future housing demand, especially given the changing demographics and preferences of current and future Southern Californians. Housing that focuses more on larger-lot single family options are at one end of the spectrum, as compared to varying mixes of townhome and multi-family options at the other.
- Transportation Investments (Road/Highway vs. Transit/Non-Auto Strategies):** While all scenarios are supported by a range of transportation options, they vary in the proportion of new investments that are focused on transit and non-auto modes versus highway and roadway improvements that facilitate local and regional

automobile travel. These transportation 'packages' are informed by past and present RTPs and incorporate a range of transit emphasis up to and including Los Angeles County's recent Measure R and 30/10 Initiative. The scenarios were designed to capture a range of potential strategies and investments by considering the relative emphasis on investment by mode, or the inclusion of policy mechanisms such as TDM or congestion pricing. The scenarios do not consider or evaluate specific transportation networks, or individual projects.

Based on the four elements above, which are illustrated in **FIGURE 4.2**, the four scenarios illustrate different land use 'themes' for how the region can grow, and the transportation system that supports that growth. **FIGURE 4.3** illustrates the land use themes for each scenario. In turn, each has a different impact on critical fiscal, environmental, and transportation challenges facing the region, as detailed in Appendix 19.

Scenario 1. This scenario is based on the General Plans prepared by cities and compiled by SCAG, with assistance from local planners, using the Local Sustainability Planning Tool (LSPT). It includes a significant proportion of suburban, auto-oriented development, but also recognizes the recent trend of increased growth in existing urban areas and around

Local Sustainability Planning Tool

As part of the SCS process, SCAG developed the Local Sustainability Planning Tool (LSPT), a GIS-based sketch planning tool that allows users to create land use scenarios and analyze their impacts. SCAG made the LSPT available to each of its jurisdictions, trained hundreds of users, and worked one-on-one with planners to assist in their use of the tool. Provided with preliminary scenarios of their planning areas for the years 2008, 2020 and 2035, local planners were then able to create, modify and compare a variety of scenarios, and their subsequent impacts on vehicle ownership, vehicle miles traveled, mode-use, and GHG emissions. This allowed the local government participation in the development of the SCS to be far more meaningful than it otherwise would have been.

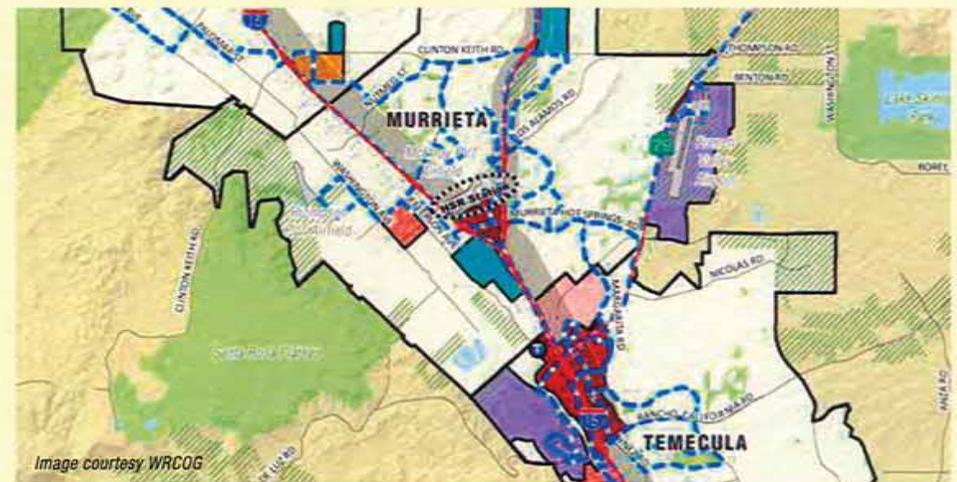
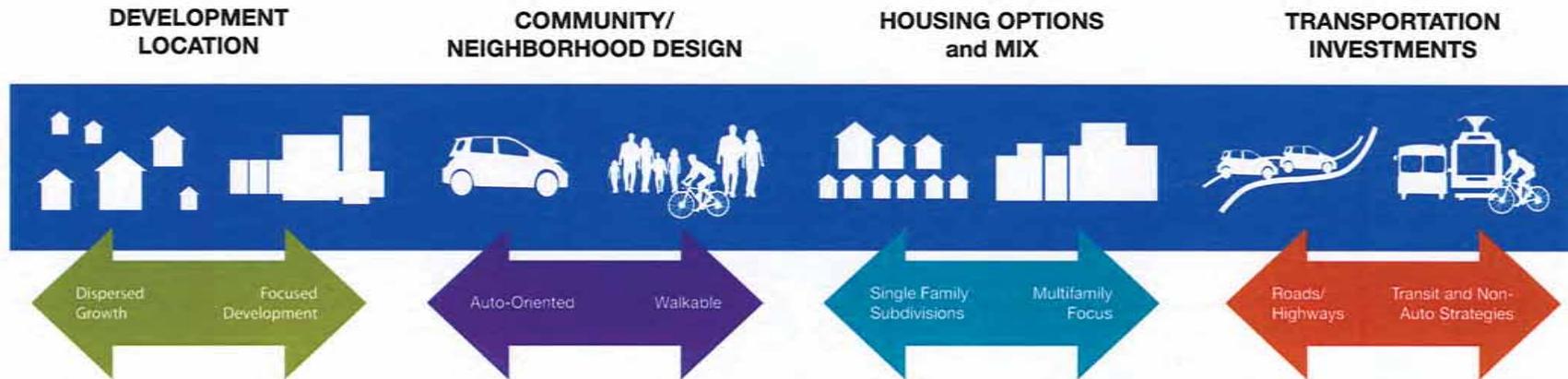


FIGURE 4.2 Workshop Scenario Elements



transit. New housing is mostly single family (58 percent), with an increase in smaller-lot single-family homes, as well as an increase in multi-family homes (42 percent). The transportation system is based on the package of improvements in the 2008 RTP. While these investments tend to favor automobile infrastructure, they also support new transit lines and other non-auto strategies and improvements.

Scenario 2. This scenario focuses more growth in walkable, mixed-use communities and in existing and planned high-quality transit areas. Under this scenario, there would be an increase in investments in transit and non-auto modes as compared to the 2008 RTP. Employment growth is focused in urban centers, around transit. Fewer new homes (29 percent) are single-family homes, as this scenario comes closer to meeting demand for a broader range of housing types, with new housing weighted less toward large-lot single-family homes (2 percent) and more towards smaller-lot single-family homes (27 percent), and multi-family condos, townhomes and apartments (70 percent).

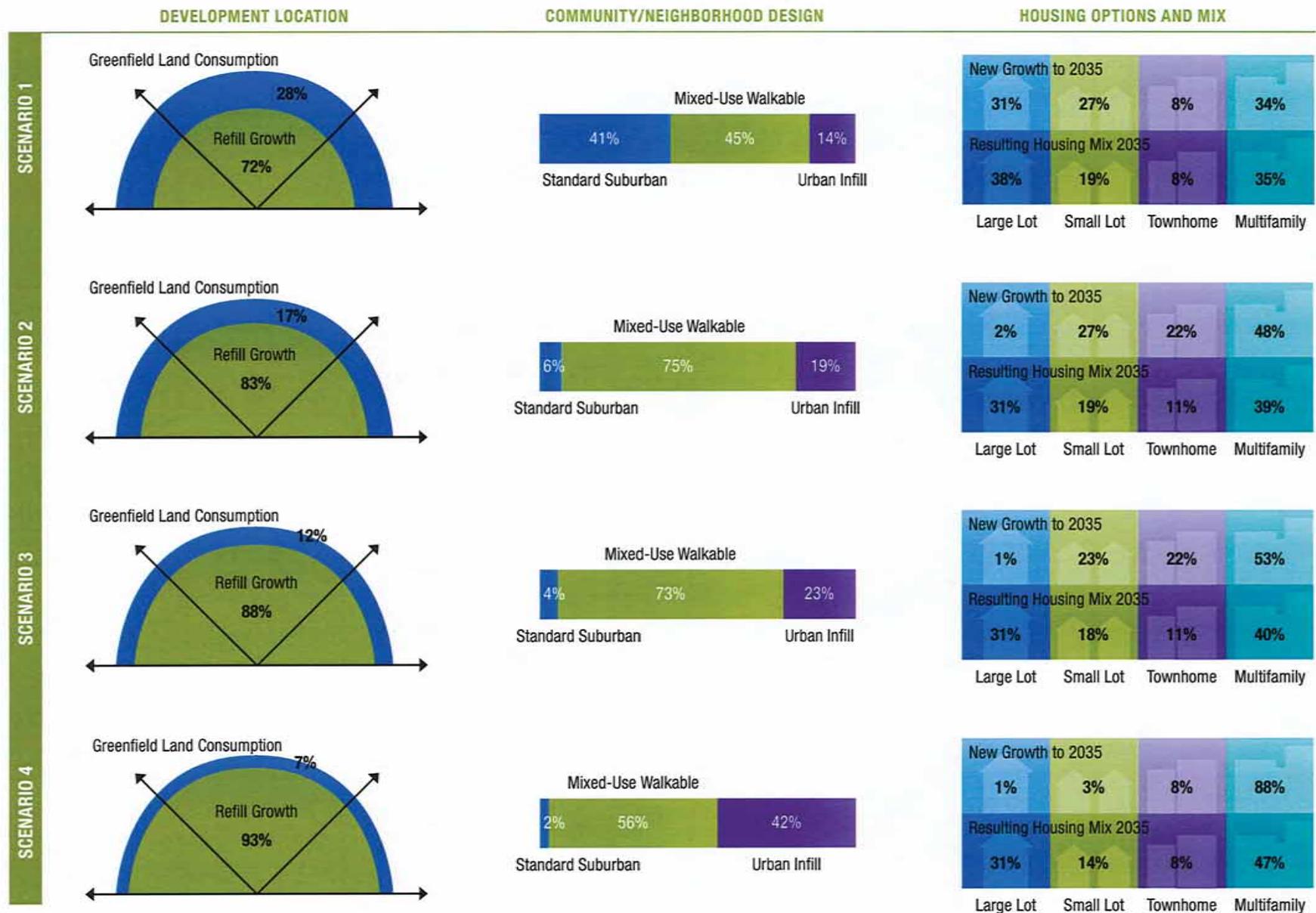
Scenario 3. This scenario builds on the walkable, mixed-use focus of the growth in Scenario 2, and also aims to improve fiscal and environmental performance by shifting even more of the region's growth into areas that are closer to transit, and less auto-centric. Like Scenario 2, this scenario, aims to meet demand for a broader range of housing types, with new housing weighted towards smaller-lot single family homes,

townhomes, and multi-family condos and apartments. In terms of percentage, the mix of housing types is very similar to Scenario 2, but the location of the growth within the region is shifted more toward transit-rich locations. Also like Scenario 2, transportation system investments would be more weighted towards transit investments, TDM, and non-auto strategies, which would support the move away from more auto-oriented development patterns.

Scenario 4. This scenario maximizes growth in urban and mixed-use configurations in already developed areas, and around existing and planned transit investments. To support this shift, transportation system investments are heavily weighted towards transit infrastructure and operational improvements (i.e., higher frequencies and more transit feeder service), as well as improvements to bicycle and pedestrian infrastructure. In order to maximize the transit investments and accommodate population in already developed areas, the vast majority of new housing (96 percent) is multi-family, while 4 percent is single-family development.

Although transportation system pricing, vehicle and fuels technology, and power generation policies will also play a role in meeting the region's goals, these factors were all held constant in the scenarios in order to more clearly communicate the impacts of land use and infrastructure policy options.

FIGURE 4.3 Workshop Scenarios (2035)





SCENARIO OUTCOMES

Once the four scenarios were created, the model was used to estimate a broad set of fiscal, environmental, and transportation impacts across the four scenarios in order to facilitate comparison. The comparative metrics generated included the following:

- Land consumption
- GHG (CO₂e) emissions from cars and buildings
- Air pollution and public health impacts
- Fuel use and cost
- Building energy and water use, and cost
- Fiscal impacts, including capital infrastructure costs, operations and maintenance costs, and local revenues

As each of these metrics was measured across the scenarios, a clear improvement in impacts was observed from Scenario 1 to Scenario 4. For instance, Scenario 1 consumes 251 square miles of undeveloped land—nearly twice as much as Scenario 2, which consumes 127 square miles—to accommodate growth to 2035. Scenario 3 consumes 84 square miles, and Scenario 4, which maximizes growth in urban and mixed-use configurations in already developed areas, brings that number down to 46 square miles. Additional results for all of the metrics can be found in Appendix 19.

Public Outreach Workshops

The four scenarios were developed specifically to be presented at a series of public workshops during the summer of 2011. These 18 workshops, required under SB 375, were held throughout the region. SCAG sought to make these workshops as transparent and interactive as possible, and obtained input from over 700 participants, including residents, public agencies, elected officials, community organizations, and environmental, housing and business stakeholders.

Through PowerPoint presentations and handouts, participants were provided with a description of each scenario and an understanding of how development location, neighborhood design, housing options and mix, and transportation investments compared between scenarios and resulted in varying impacts for the region.

With these intrinsic tradeoffs in mind, the group then engaged in a discussion of objectives and priorities for the 2012 RTP/SCS, including mobility, environment, health, modes of travel, economy, safety, equity, and housing. Input was collected through anonymous remote polling instruments (the results of which were presented in real-time) and through group discussions.

Collective input from all of the workshops showed the economy, environment, and transportation as top priorities for the region. Discussions focused on mobility, modes of travel, environmental and community impacts, and potential funding mechanisms. Polling results indicated a preference that future employment, commercial and residential areas be located in mixed use areas. Most participants also indicated a desire for increased travel mode choice in the region, and for transportation investments to be made in all modes (auto, bus, rail, bicycle, etc.). Additional results from the workshops can be found in Appendix 16.

RTP/SCS Overall Land Use Pattern

SCAG used the feedback from local planning sessions, public outreach workshops, and consultation with local jurisdictions to work collaboratively with policymakers,

stakeholders, and local governments to develop and analyze a series of 2012 RTP/SCS alternatives, and eventually arrive at the regional RTP/SCS.

The RTP/SCS was built primarily from local General Plans and input from local governments using the Local Sustainability Planning Tool, from the subregional COGs, and from the County Transportation Commissions, as previously discussed. The adopted Subregional SCSs of the Gateway Cities COG and Orange County COG were integrated as provided into the regional RTP/SCS. These subregional SCSs were developed in close collaboration with SCAG and utilize various strategies that help achieve estimated GHG reduction targets.

The Gateway Cities COG (GCCOG) Subregional SCS, found in Appendix 20, was built upon each local jurisdiction selecting GHG reduction strategies that are a blend of efforts that GCCOG and its communities have been pursuing over the last decade and future efforts that each jurisdiction plans to implement over the next 25 years. GCCOG implemented an outreach program that provided stakeholders and community members various opportunities to learn about the SCS process and provide feedback. The outreach program included a stakeholder briefing to provide information about the SCS process and to address questions on related topics; and public information open houses to

Delegated Subregions

Unique to SCAG is a special provision within SB 375 that allows any subregional Council of Governments (COGs) the option of developing its own subregional SCS within the region. SCAG adopted a Subregional Framework and Guidelines (see Appendix 20) to establish standards for preparing and submitting a subregional SCS, while laying out SCAG's role in facilitating and supporting the subregional effort with data, tools, and other assistance.

The Orange County Council of Governments and the Gateway Cities Council of Governments chose to develop their own SCS and entered into Memoranda of Understanding with SCAG specifying submission schedules and standards for each component of the subregional SCS. While the subregional COGs were responsible for conducting their own research and outreach to develop their subregional SCS, they worked closely with SCAG through workshop preparation, data and information sharing, and regular meetings. SCAG's Local Sustainability Planning Tool was also made available to the subregions along with trainings and one-on-one working sessions to assist in the review and revision of the preliminary scenarios. The two subregional SCS documents can be found, in their entirety, in Appendix 20.

present basic information and provide a forum for one-on-one dialogue with project team members.

The Gateway Cities COG SCS combines the following five bundles of strategies to meet estimated GHG reduction targets:

- Transportation Strategies
- Transportation Demand Management Strategies
- Land Use Strategies
- Regional Transportation Projects, including Measure R
- Interactive Effects between Land Use and Regional Transit Projects

The OCCOG Subregional SCS, also found in Appendix 20, combines strategies that show a collective effort by many Orange County jurisdictions, agencies, and groups to link transportation and land uses through a variety of processes and progressive measures. OCCOG conducted a series of outreach events to provide information and to solicit input on the development of the subregional OC SCS. The outreach program included public meetings at various milestones in the development of the OC SCS; a series of roundtable discussions with Orange County nonprofit organizations; and a web tool to facilitate and document public engagement. Each component of the outreach program introduced SB 375 and the OCCOG SCS process, provided status reports, and facilitated the opportunity for public review and comment.

Central to the OCCOG SCS are the strategies identified to reduce GHG emissions. These strategies illustrate that there is already a collective effort among Orange County jurisdictions, agencies, and groups to link transportation and land uses through a variety of processes and an array of measures. The sustainability strategies are compiled as completed projects, ongoing projects, future projects, and General Plan policies. The scope of current and planned strategies is broad and encompasses significant investment by both the public and private sectors for implementation strategies include the following:

- Promoting a land use pattern that accommodates future employment and housing needs
- Using land in ways that make developments more compact and improves linkages among jobs, housing and major activity centers
- Protecting natural habitats and resource areas



- Implementing a transportation network of public transit, managed lanes and highways, local streets, bikeways, and walkways built and maintained with available funds
- Managing demands on the transportation system (TDM) in ways that reduce or eliminate traffic congestion during peak periods of demand
- Managing the transportation system (TSM) through measures that maximize the efficiency of the transportation network
- Utilizing innovative pricing policies to reduce vehicle miles traveled and traffic congestion during peak periods of demand

COMPONENTS OF THE OVERALL LAND USE PATTERN

A review of local plans and subregional strategies points to the common ground that is inherent in SCAG's own advisory land use policies. These policies and strategies were first conceived through regional growth visioning efforts and have continued to evolve as SCAG has developed its understanding and expertise in land use and transportation integration. SCAG utilizes the following advisory land use policies and strategies as a foundation for the overall regional land use development pattern:

- **Identify regional strategic areas for infill and investment** – Identify strategic opportunity areas for infill development of aging and underutilized areas and increased investment in order to accommodate future growth.
- **Structure the plan on a three-tiered system of centers development** – Identify strategic centers based on a three-tiered system of existing, planned and potential, relative to transportation infrastructure.
- **Develop “complete communities”**– Create mixed-use districts or “complete communities” in strategic growth areas through a concentration of activities with housing, employment, and a mix of retail and services, located in close proximity to each other.
- **Develop nodes on a corridor** – Intensify nodes along corridors with people-scaled, mixed-use developments.
- **Plan for additional housing and jobs near transit** – Support and improve transit use and ridership by creating pedestrian-friendly environments and more compact development patterns in close proximity to transit.

- **Plan for a changing demand in types of housing** – Address shifts in the labor force that will likely induce a demand shift in the housing market for additional development types such as multi-family and infill housing in central locations, which will appeal to the needs and lifestyles of these large populations.
- **Continue to protect stable existing single-family areas** – Continue to protect stable existing single-family neighborhoods as future growth and a more diverse housing stock are accommodated in infill locations near transit stations.
- **Ensure adequate access to open space and preservation of habitat** – Ensure access to open space and habitat preservation despite competing quality-of-life demands driven by growth, housing and employment needs, and traditional development patterns.
- **Incorporate local input and feedback on future growth** – Continue public outreach efforts and incorporate local input through public workshops, scenario planning, and stakeholder outreach.

These policies have evolved over time and serve as the basis for SCAG's Compass Blueprint, a regional program that offers innovative planning tools, creative strategies and collaborative partnerships to all local governments within the region. Since its inception, Compass Blueprint has supported local demonstration projects that seek to improve mobility for all residents, foster livability in all communities, enable prosperity for all people, and promote sustainability for future generations.

In addition to Compass Blueprint, cities and counties within the SCAG region continue to implement their own local land use and transportation projects that support the goals of the RTP/SCS. These local efforts were considered in the development of the overall land use pattern of the RTP/SCS. Throughout this chapter, there are examples of plans and projects that advance the goals of the RTP/SCS at the local level. A complete list of RTP/SCS supportive projects can be found in Appendix 19, and a complete list of transportation projects can be found in Appendix 1.

SCAG reviewed the input received from local jurisdictions between May 2009 and August 2011 and analyzed land use trends that have been occurring within the region over the past years. It is clear that there has been, and continues to be, a significant trend of development policies and decisions within local jurisdictions towards better integration of land use and transportation. Some of these recent trends include:

Compass Blueprint

Since 2004, Compass Blueprint has been a model for integrating land use and transportation planning and turning regional vision into local reality. Guided by four core principles, Mobility, Livability, Prosperity and Sustainability, these efforts have effectively given the region a “jump-start” in implementing this SCS. At the core of Compass Blueprint are Demonstration Projects – incentive-based, voluntary partnerships between SCAG and local governments that apply innovative approaches and tools to local plans that support regional priorities. As of September 2011, SCAG has provided over \$10.5 million in incentive funds for 132 Demonstration Projects in 95 local jurisdictions. Projects have included transit-oriented development plans for station areas along new light-rail alignments, downtown revitalization efforts, community visioning projects in low-income communities, and other projects that support shared local and regional goals. EXHIBIT 4.4 shows all completed Compass Blueprint Demonstration Projects to date. A complete list of past and current Compass Blueprint Demonstration projects can be found in Appendix 19.

Future Demonstration Projects will continue to serve as models throughout the region by focusing on regionally-significant local plans that directly implement the SCS and its goal of translating policy to on-the-ground land use changes and multi-modal transportation improvements. Concurrently, Compass Blueprint will further incentivize local implementation of the SCS through the Compass Blueprint Awards Program recognizing models of innovative planning in the region, and through the Toolbox Tuesdays program - free, monthly, professional training events for local planners in cutting-edge planning tools and approaches developed in Demonstration Projects.



Image courtesy of SANBAG



Image courtesy of City of Los Angeles

- Changing demographics and housing market demand
- Redevelopment of main streets, downtowns and corridors to vibrant mixed-use neighborhoods
- Transit-oriented development adjacent to rail station areas and along major bus corridors
- Protection of resource areas and farmland

In most cases, current adopted local general plans do not go out as far in time as the 2012 RTP/SCS horizon year – 2035. Thus, in developing the overall land use development pattern SCAG identified strategic opportunity areas within city and county boundaries to logically continue recent development trends to 2035. While maintaining local jurisdictions' local input for growth totals for both 2020 and 2035, the RTP/SCS incorporates the following within the regional model:

- Compass Blueprint Demonstration Projects that can reasonably be expected to be implemented by 2035;
- Additional local growth that jurisdictions have indicated subsequent to the local input process being completed earlier this year;
- Future multiple family residential and employment growth that are emphasized in planned High-Quality Transit Areas (HQTAs) post-2020 to a greater extent than currently portrayed in current General Plans, which do not go out to 2035;
- Future multiple family residential and employment growth that are also emphasized along main streets, historic downtowns and other appropriate corridors post-2020 to create mixed use, and walkable “transit-ready” communities to a greater extent than currently portrayed in current General Plans, which do not go out to 2035; and
- A shift from single-family residential development towards multi-family residential development post-2020 to a greater extent than currently portrayed in General Plans to reflect recent trends seen during the past 20 years.

(Note: Land use inputs for OCCOG and GCCOG SCS were unchanged.)

Transportation Analysis Zones (TAZs) and Community/Development Types

To conduct required modeling analysis for the RTP/SCS, SCAG distributes the growth forecast data to transportation analysis zones (TAZs) to capture localized effects of the interaction of land use and transportation. Additionally, SB 375 offers local governments potential CEQA relief for qualified development projects consistent with an adopted SCS. SCAG suggests that utilizing community types at the TAZ level of geography (with an average size of 160 square acres) offers local jurisdictions adequate information and flexibility to make appropriate consistency findings for projects to be eligible to receive CEQA streamlining benefits.

To further facilitate regional modeling of land use information from nearly 200 separate jurisdictions, SCAG developed a simplified series of Community Types to represent the land use categories taken from the region's many general plans. Each Community Type is comprised of various characteristics related to employment and housing density, urban design, mix of land uses, and transportation options. The land use pattern maps presented in this chapter use five Community Types: urban, city, town, suburban and



rural. These five are further divided into 13 Development Types that each additionally express use designations, densities and building intensities. For any given community type, there is one residential density indicated, which is considered a potential ultimate average for the TAZ and not an absolute project-specific requirement that must be met in order to determine consistency with the RTP/SCS. Details describing the characteristics contained within each of the five Community Types and 13 Development Types are available in Appendix 19.

Utilizing TAZs and Community/Development Types, and incorporating local input and land use trends, the overall land use pattern considers the following factors:

- Urbanized Core vs Periphery
- Changing Demographics and Housing Market Demand
- Adjustments for Housing Capacity
- Main Streets, Downtowns and Corridors
- Resource Areas and Farmland
- Transit Stations and High-Quality Transit Areas (HQTA)

Urbanized Core vs Periphery

As the largest Metropolitan Planning Organization in the nation, SCAG encompasses a geographical area of great diversity. From its population, to its industries, lifestyles, environments and political climates, planning for a region of this size and scope is never a “one size fits all” feat. The greatest distinction is between the region’s urbanized core and its peripheral areas.

EXHIBIT 4.5 shows the locations of urban centers within the SCAG region. These are areas where strategies such as compact community design, mixed-use development, redevelopment of aging retail areas, greater housing variety, and additional transit service are more likely to succeed. Conversely, less dense areas in the periphery may benefit from different strategies. The overall land use pattern takes these differences into account.

Changing Demographics and Housing Market Demand

SB 375 combines transportation and housing planning by integrating the Regional Housing Needs Assessment (RHNA) process with the RTP/SCS. Specifically, Government Code Section 65080(b)(2)(B), subparagraphs (iii) and (vi), require that the SCS identify areas within the region sufficient to house an eight-year projection of the regional housing need for the region and consider the state housing goals specified in Government Code Sections 65580 and 65581. SCAG has been engaged in the RHNA process concurrently with the development of the RTP/SCS. This process requires SCAG to work with its member agencies to identify areas within the region that can provide sufficient housing for all economic segments of the population and ensure that the state’s housing goals are met.

The SCAG region’s official regional housing need from the California Department of Housing & Community Development (HCD) for the planning period 2014–2021 is 409,000–438,000 housing units. Of these, approximately 164,000–176,000 are expected to be in the very low- and low-income category (affordable to those who make less than 80 percent of area median income), 72,000–77,000 are expected to be in the moderate-income category (affordable to those who make between 80 percent and 120 percent of median income), and 173,000–185,000 are expected to be offered at above moderate-income category.

The regional target determined by HCD considered projected household growth and socioeconomic data based on local input, the 2010 Census, and the California Department of Finance. As part of its determination, HCD considered current economic conditions, which have contributed to a high number of vacancies for many communities, often in excess of a healthy market rate. For this reason, HCD permitted the application of a one-time excess vacancy credit due to abnormal market conditions, slightly lowering preliminary growth expectations for the eight-year planning period.

The RHNA Allocation was developed with reliance on local input on projected household growth and responses to local surveys. Results from the surveys support consistency with the state housing goals by encompassing a variety of planning factors that identify opportunities and constraints for jurisdictions to plan for housing at all income levels. These factors include the availability of suitable land, market demand for housing, distribution of household growth along transit corridors, and replacement need. To address increasing concerns regarding affordability, each jurisdiction’s future housing

Community Types

To facilitate regional modeling of land use information from nearly 200 separate jurisdictions, SCAG developed a simplified series of “community types” to represent the dominant land use patterns and themes contained in the region’s many general plans. The community types employed in the RTP/SCS are not intended to represent detailed land use policies, but are used to describe the general conditions likely to occur within a specific area. The following community types are each comprised of specific characteristics related to jobs and housing density, urban design and mix of land uses, and transportation options. These five are further divided into 13 Development Types, which additionally express land use designations, densities and building intensities. Detailed descriptions of these community types and more specific development types are found in Appendix 19.

Urban

Urban areas are the highest intensity community types. These centrally located districts have significant amounts of employment and corresponding residential uses and retail, typically located in a dense cluster of multi-story buildings and high-rise buildings. Urban areas are also typically located at the convergence of a number of high capacity transit facilities complemented by non-auto infrastructure that also provide access and connectivity.

City

The City community type is on average one-half the intensity of the Urban community type. These areas contain significant employment centers and a mix of medium- and high-density housing, supported by retail and daily services. One to two high capacity transit facilities, a number of bus routes, and non-auto infrastructure provide access and connectivity to a range of activities and locations.

Town

The Town community type provides low- to medium-density housing opportunities that are located close to local-serving retail and daily services. These areas are characterized by an employment core or an independent job center in low- to mid-rise structures. Sidewalks and

bike facilities are adequate and the areas benefit from one high capacity transit facility and local buses.

Suburban

Suburban areas contain a mix of uses, but often have one predominant use, such as residential or office. Residential areas are typically low-density with larger lots and are separated from retail and other daily service uses. Though these areas are predominantly served by automobiles, bus service and commuter rail may also operate in certain neighborhoods.

Rural

Rural areas include both jobs and housing, though these two uses are rarely found in close proximity to each other. Housing is characterized by acreage lots and ranches, and is often far from commercial and employment activities, which occur in isolated nodes located on rural cross-roads and highway services zones. Transit and non-auto facilities rarely serve these areas, making automobile use the most frequent mode of travel.

EXHIBIT 4.5 Urban Centers SCAG Region



Local Efforts

El Centro Downtown Revitalization

Downtown El Centro is a historic and distinct part of Imperial County that contains many businesses, restaurants, shops, services and public spaces. After many years of focusing on new development in other portions of El Centro, the City and local stakeholders recognized a need for revitalization. A highly collaborative visioning effort, undertaken in partnership with SCAG's Compass Blueprint, resulted in a new Downtown Plan that contains incentives and design guidelines for improved walkability and mixed use development, including housing.



Image courtesy of City of El Centro

need is adjusted to balance the proportion of affordable housing by county across the region. This adjustment considers areas that have a high proportion of certain income groups and adjusts future household growth towards a goal of social equity. This mitigates overconcentration of income groups and encourages planning for affordable housing in areas with limited opportunities in affordable housing.

The RTP/SCS incorporates the overall RHNA target for the SCAG region and provides a land use pattern that shows where new housing growth can be accommodated in the future. In 2008, the SCAG region was comprised of about 17.9 million people, 5.8 million homes and 7.7 million jobs. The 2035 Integrated Growth Forecast projects that the region will grow by another 4 million people by 2035, and nearly 1.5 million households and 1.7 million jobs will be added. The RTP/SCS land use pattern contains sufficient residential capacity to accommodate the region's future growth, including the 8-year regional housing need, as shown in TABLE 4.1. The land use pattern accommodates approximately 648,000 additional housing units in the SCAG region in 2020, and over 1.5 million additional housing units in 2035. As shown in TABLE 4.2, the land use pattern also encourages improvement in the jobs-housing balance by accommodating 680,000 additional jobs in 2020 and approximately 1.7 million additional jobs in 2035.

TABLE 4.1 Summary of Total Housing Units Forecasted in RTP/SCS

| Community Type | Existing Housing Units (2008) | Total Forecasted Housing Units (2020) | New Housing Units (2008–2020) | Total Forecasted Housing Units (2035) | New Housing Units (2008–2035) |
|----------------|-------------------------------|---------------------------------------|-------------------------------|---------------------------------------|-------------------------------|
| Urban | 139,000 | 180,000 | 41,000 | 226,000 | 87,000 |
| City | 685,000 | 755,000 | 70,000 | 948,000 | 263,000 |
| Town | 2,496,000 | 2,760,000 | 264,000 | 3,159,000 | 663,000 |
| Suburban | 2,333,000 | 2,556,000 | 223,000 | 2,750,000 | 417,000 |
| Rural | 162,000 | 212,000 | 50,000 | 241,000 | 79,000 |
| Total | 5,815,000 | 6,462,000 | 648,000 | 7,324,000 | 1,509,000 |

TABLE 4.2 Summary of Total Jobs Forecasted in RTP/SCS

| Community Type | Existing Jobs (2008) | Total Forecasted Jobs (2020) | New Jobs (2008-2020) | Total Forecasted Jobs (2035) | New Jobs (2008-2035) |
|----------------|----------------------|------------------------------|----------------------|------------------------------|----------------------|
| Urban | 503,000 | 531,000 | 28,000 | 573,000 | 70,000 |
| City | 1,029,000 | 1,077,000 | 48,000 | 1,193,000 | 164,000 |
| Town | 2,872,000 | 3,098,000 | 226,000 | 3,575,000 | 703,000 |
| Suburban | 3,183,000 | 3,515,000 | 332,000 | 3,874,000 | 691,000 |
| Rural | 147,000 | 195,000 | 48,000 | 221,000 | 74,000 |
| Total | 7,734,000 | 8,416,000 | 682,000 | 9,436,000 | 1,702,000 |

Currently, SCAG is home to approximately 6 million households, 55 percent of which currently live in detached single-family homes. As noted earlier, the region is expected to add 648,000 new households by 2020 and a total of 1.5 million new households by 2035. But the changing nature of these households means that there will most likely be less demand for single-family homes, especially those on large lots. In the postwar era that shaped the popular image of Southern California, most households consisted of parents with children. In the 21st Century this no longer holds true, and today, only a small minority of households have children at home and the number of households without children—including senior citizens and young people forming their first household—is dramatically increasing. As a result, there is an expected increase in demand for small-lot single-family houses and multi-family housing in close proximity to amenities, including local shopping and transit service.

This significant shift in demographics and household demand is apparent in the land use development pattern of the RTP/SCS, which assumes a significant increase in small-lot single-family and multi-family housing that will mostly occur in infill locations near transit infrastructure. In some cases, the land use pattern assumes that more of these housing types will be built than is currently anticipated in local general plans, and in most cases, this shift in housing type—especially the switch from large-lot to small-lot single-family homes—will occur naturally in the marketplace as developers shift to products in high demand. In 2008, 45 percent of total housing units were multi-family products. The RTP/

SCS projects that in 2035, 68 percent of new homes in the SCAG region will be multi-family units.

Of the 648,000 new housing units expected in 2020, 28 percent will be at a minimum 30 dwelling units per acre; and of the 1.5 million new housing units expected in 2035, 34 percent will be at a minimum 30 dwelling units per acre. In accordance with Government Code Section 65080(b)(2)(B)(ii), these projected housing densities will help the region accommodate the projected housing needs at all income levels over the life of the RTP, especially housing at the lower income categories. Additionally, SCAG moves towards improving the current distribution of households by income category in the region through the allocation of projected housing needs at the local level. Appendix 19 lists the draft local RHNA allocations by jurisdiction. When the final RHNA plan is adopted in October 2012, SCAG jurisdictions will revise their Housing Elements to meet their respective allocations. The SCS's strategies will inform the development of those Housing Elements.

As significant changes occur in existing communities there is potential for “gentrification,” or the displacement of lower-income residents if new development brings higher-income residents into a neighborhood. As the RTP/SCS is implemented, jurisdictions in the SCAG region must be sensitive to the possibility of gentrification and work to employ strategies that can ameliorate it. One strategy is the general approach of higher-density infill development, which means that neighborhoods will be adding to the local housing stock rather than maintaining the current stock and simply changing the residential population. A second is the development of permanently affordable housing, through deed restrictions or development by nonprofit developers, which will ensure that some units will remain affordable to lower income households. SCAG will work with local jurisdictions and community stakeholders to seek resources and provide assistance to address any possible gentrification effects of new development on existing communities and vulnerable populations.

Adjustments for Housing Capacity

As SCAG and its partner jurisdictions underwent the process of creating the overall land use pattern, it became apparent that some parts of the urbanized core planned for household growth greater than the amount in the Integrated Growth Forecast, while some areas in the periphery had less housing capacity than the forecast assumptions. For this reason, the land use development pattern of the RTP/SCS shifts an additional 15,000

households from the periphery into the urbanized core by 2020 and an additional 50,000 households by 2035, per consultation with the local jurisdictions.

The areas receiving additional growth are well served by transit, with a mix of uses and other design elements that are likely to reduce the need for auto travel. Thus, this adjustment allowed the land use pattern to conform more closely to local expectations, while reducing the amount of vehicle miles traveled.

Main Streets, Downtowns, and Corridors

The demand for smaller lots and multi-family housing often goes hand-in-hand with a desire to be close to amenities, retail, restaurants and recreation. The land use pattern places a high percentage of new housing and jobs in main streets, downtowns, and along corridors where infrastructure already exists. This geographical placement makes sense given the SCAG region's trend toward revitalization of these older, traditionally commercial areas. Such a pattern has many co-benefits, including walking access to community amenities, lower VMT, lower transportation cost for both cities and individuals, and lower overall infrastructure cost.

Resource Areas and Farmland

In identifying the overall land use pattern, the RTP/SCS also considers areas that are to be protected from development, as required by Government Code Section 65080(b)(2) (B)(v). These areas, which include parklands, open space, natural resource areas, and farmland, are critical for the region's environmental and economic health. **EXHIBITS 4.6, 4.7 and 4.8** show the locations of these areas. Data gathered from the sources listed below were compiled into relevant datasets and provided to local jurisdictions within the region for review and revision. The updated information was then used to ensure the protection of resources areas in the development of the overall land use pattern.

- California Natural Diversity Database (California Department of Fish and Game)
- Flood Insurance Rate Maps (Federal Emergency Management Agency)
- Natural Community Conservation Planning Program (California Department of Fish and Game)
- California Protected Areas Database (GreenInfo)
- Farmland Mapping & Monitoring Program (Division of Land Resource Protection in California Department of Conservation)

SCAG is also developing a natural lands acquisition and open space conservation strategy to encourage large-scale acquisition and management of critical habitat to mitigate impacts, including greenhouse gas emissions, related to future transportation projects. The strategy will identify appropriate agencies with which to collaborate in order to develop a regional conservation plan based on identified priority areas. SCAG will then develop a regional mitigation plan for inclusion in the 2016 RTP.

Transit Stations and High-Quality Transit Areas (HQTAs)

The overall land use pattern focuses jobs and housing in the region's designated High-Quality Transit Areas (HQTAs) that have been identified within the region, as illustrated in Exhibit 4.9. A HQTAs is generally a walkable transit village, consistent with the adopted SCS that has a minimum density of 20 dwelling units per acre and is within a ½ mile of a well-served transit stop, and includes transit corridors with minimum 15-minute or less service frequency during peak commute hours. The RTP/SCS assumes that 51 percent of new housing developed between 2008 and 2035 will be within HQTAs, along with 53 percent of new employment growth (compared with 39 and 48 percent, respectively in 2008). Aligning a high quality transit network and new housing and jobs offers Southern



Image courtesy of Jessica Meaney, Safe Routes to School

Californians more complete communities that offer a variety of transportation and housing choices, while reducing the negative impacts of automobile use on public health and the environment.

TRANSPORTATION NETWORK AND STRATEGIES

The land use and housing mix in the RTP/SCS is inextricably linked to a transportation network and a set of transportation strategies that, as required by Government Code Section 65080(b)(2)(B)(iv), services the transportation needs of the region. Chapter 2 of the 2012 RTP/SCS lays out various transportation measures that offer a variety of mode choices, increase efficiency and mobility, and improve access for all users in the region. As such, the RTP/SCS incorporates the following transportation network enhancements and management approaches:

Transportation Network

The 2012 RTP/SCS calls for an expanded transportation network that will complement the overall land use pattern's focus on locating new growth in High-Quality Transit Areas and other opportunity areas, which in turn allows the RTP/SCS to leverage greater improvement in transportation capacity and system operations than would otherwise be the case. Working together, these complementary land use and transportation strategies can significantly reduce VMT— a primary goal of SB 375— by increasing transit ridership, increasing walking and biking, and reducing the length of auto trips.

As shown in **EXHIBIT 4.10**, the RTP/SCS calls for an expansion of the public transit network and transit service on new and existing routes, resulting in greater transit accessibility and connectivity throughout the region—a complement to the strategy of focusing new growth in HQTAs. Funded in large part by local county sales tax programs, transit network expansion includes the addition of new corridors and lengthening existing

Benefits of Integrating Land Use and Transportation

1. Better Placemaking

Creating better places for people to live and work, such as walking and bicycling opportunities, varied housing options and more compact development can reduce travel time and relieve road congestion.

2. Lower Cost to Taxpayers and Families

Developing more compact neighborhoods and placing everyday destinations closer together can reduce the burden of development to taxpayers and reduce the everyday cost of housing and transportation for families.

3. Benefits to Public Health and the Environment

Better placemaking and reducing the footprint of new development will provide more opportunities for an active lifestyle and protect natural resources and greenfield sites.

4. Greater Responsiveness to Demographics and the Changing Housing Market

More walkable neighborhoods with varied housing options and transportation choices will be more responsive to the changes in market demand being driven by the region's demographic changes.

5. Improved Access and Mobility

Enhancing critical auto connections and increasing alternative transportation options can improve people's ability to move around the region and provide easy access to everyday destinations.

EXHIBIT 4.6 Natural Resource Areas SCAG Region

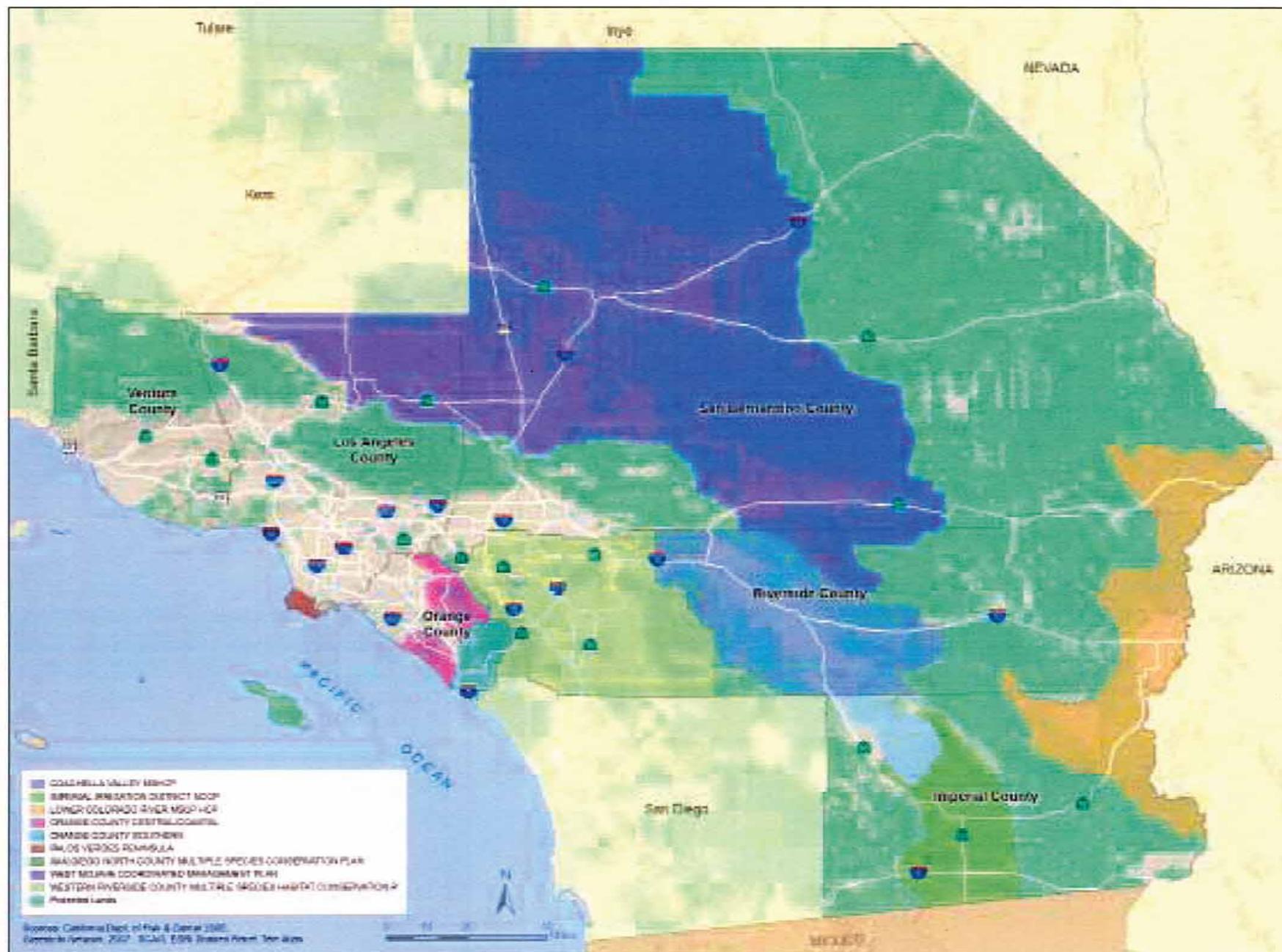


EXHIBIT 4.7 Open Space SCAG Region

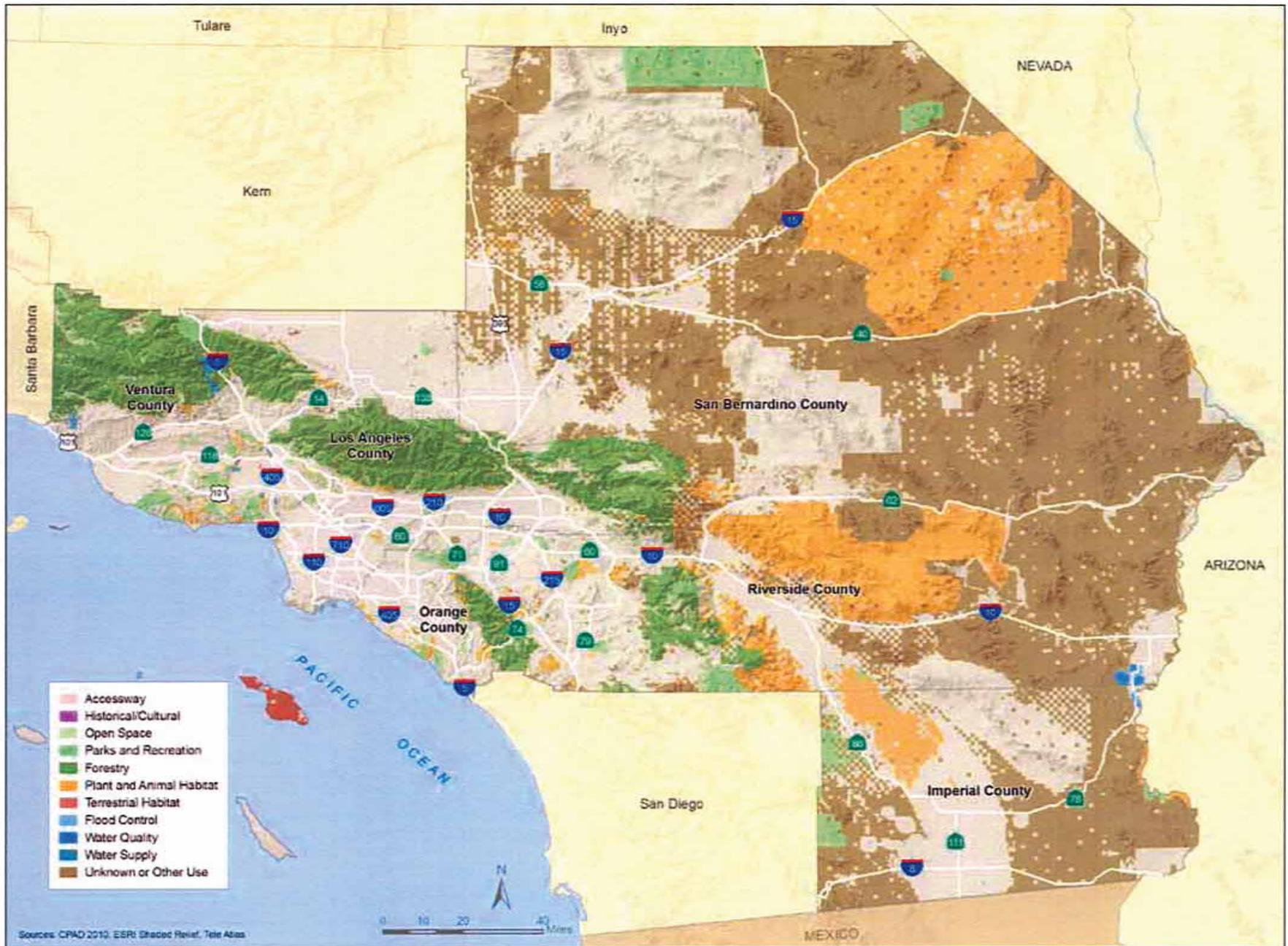
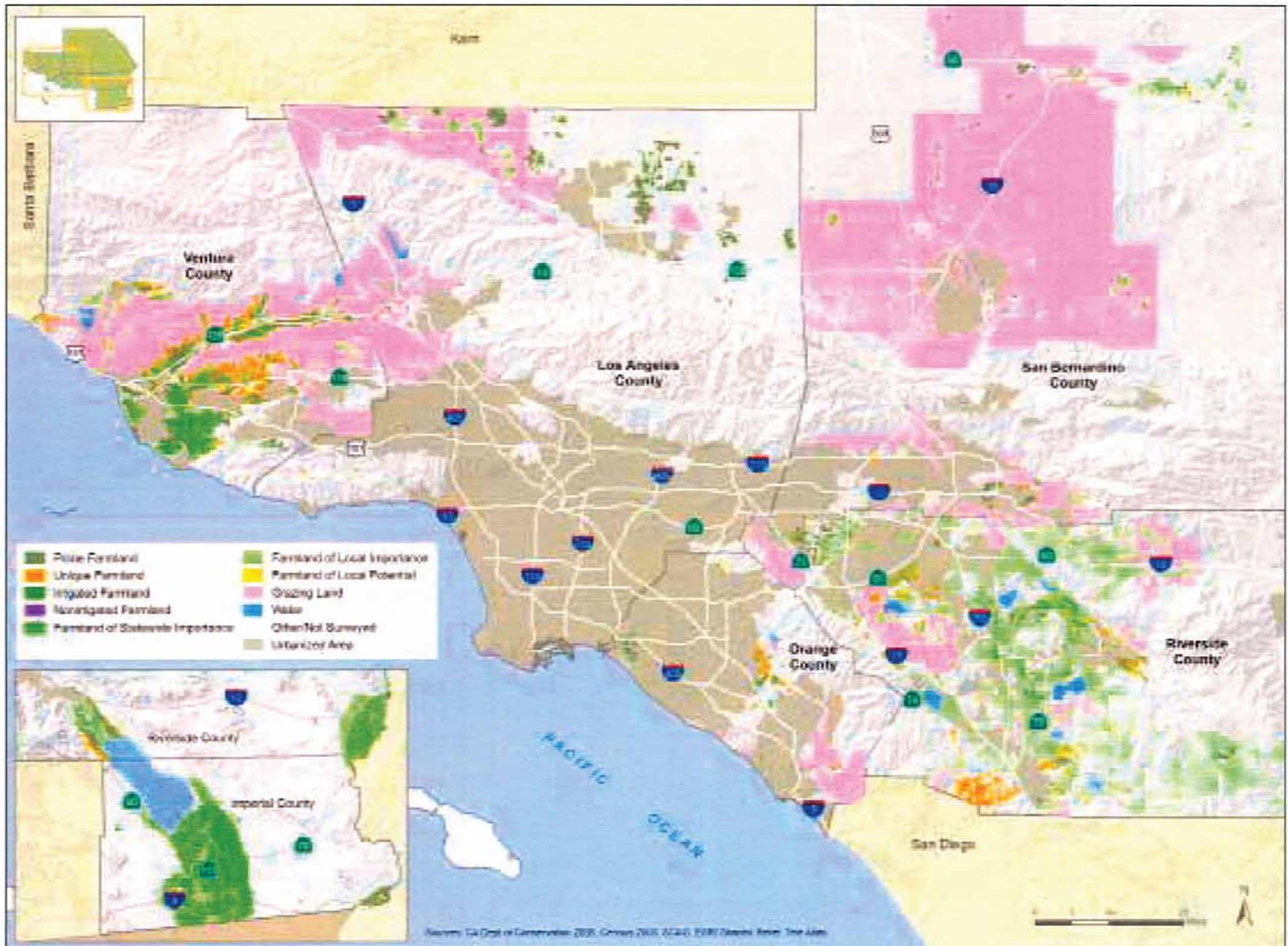


EXHIBIT 4.8 Farmland SCAG Region



ones in Los Angeles County through Metro's 30/10 initiative; introduction of the first bus rapid transit (BRT) systems and increasing Metrolink service in Orange County, Riverside County and San Bernardino County; establishment of new trolley systems in the cities of Santa Ana, Anaheim and Garden Grove; and the introduction of the rail connection from Downtown San Bernardino to Redlands. The RTP/SCS also proposes three passenger rail strategies that will provide additional travel options for long distance travel within the region and to neighboring regions. These include improvements to the LOSSAN Corridor, improvements to the existing Metrolink system and implementation of the California High Speed Train (HST) project.

The 2012 RTP/SCS also includes a notable increase in the regional active transportation network, as shown in **EXHIBIT 4.11**. Rainfall in the SCAG region typically averages only 30 days per year, which provides ideal conditions for walking and bicycling. Active transportation is an essential part of the SCAG transportation system, is low cost, does not emit greenhouse gases, can help reduce roadway congestion, and increase health and the quality of life of residents. Active transportation will receive a total of \$6 billion in available revenues under the 2012 RTP/SCS, compared to \$1.8 billion in the 2008 RTP, which represents an increase of more than 200 percent. This emphasis signifies an important opportunity to advance the goals of SB 375 by increasing non-motorized modes of transportation; thereby, expanding access to a variety of land uses and transit; and improving public health and air quality.

Along with strategic capacity enhancements and technological improvements of the existing highway (as shown in Exhibit 4.12) and local streets, including the implementation of a high occupancy toll (HOT) network, these transit, rail, and active transportation expansions complement the preferred land use pattern and support the expected growth throughout the region. The overall land use pattern's focus on locating additional growth in High-Quality Transit Areas relies on the development of high capacity transit stations and efficient transportation corridors that leads to significant VMT reductions and other benefits due to higher walk/bike mode share, more transit use and shorter auto trips.

Travel Demand Management (TDM)

In addition to the transportation network, the RTP/SCS also relies on strategic and extensive Travel Demand Management (TDM) measures that support the expected land use pattern. These relatively cost-effective strategies improve the effectiveness and

Local Efforts

Feasibility Study of San Bernardino Mountain-Valley Railway System

SCAG recently partnered with the San Bernardino Associated Governments (SANBAG) and Inland Valley Development Agency (IVDA) to study the feasibility of a San Bernardino Mountain-Valley railway system that would provide a reliable, clean form of transportation for residents and visitors between the San Bernardino Valley and the mountain communities, including Big Bear Lake, with connecting travel options at both ends.

Los Angeles County's Measure R

The 2012 RTP/SCS's network includes all projects funded by the region's newest sales tax measure, Los Angeles County's Measure R. This measure provides more funding to transit than any other category, with about a dozen projects that improve and expand the region's transit system. These projects include Metrolink capital improvements, extensions to several Metro Rail lines, and new clean-fuel bus purchases.



Photograph courtesy of Metro. ©2011 LACMTA

EXHIBIT 4.10 Transit Network SCAG Region



EXHIBIT 4.11 Proposed Bikeway Network SCAG Region

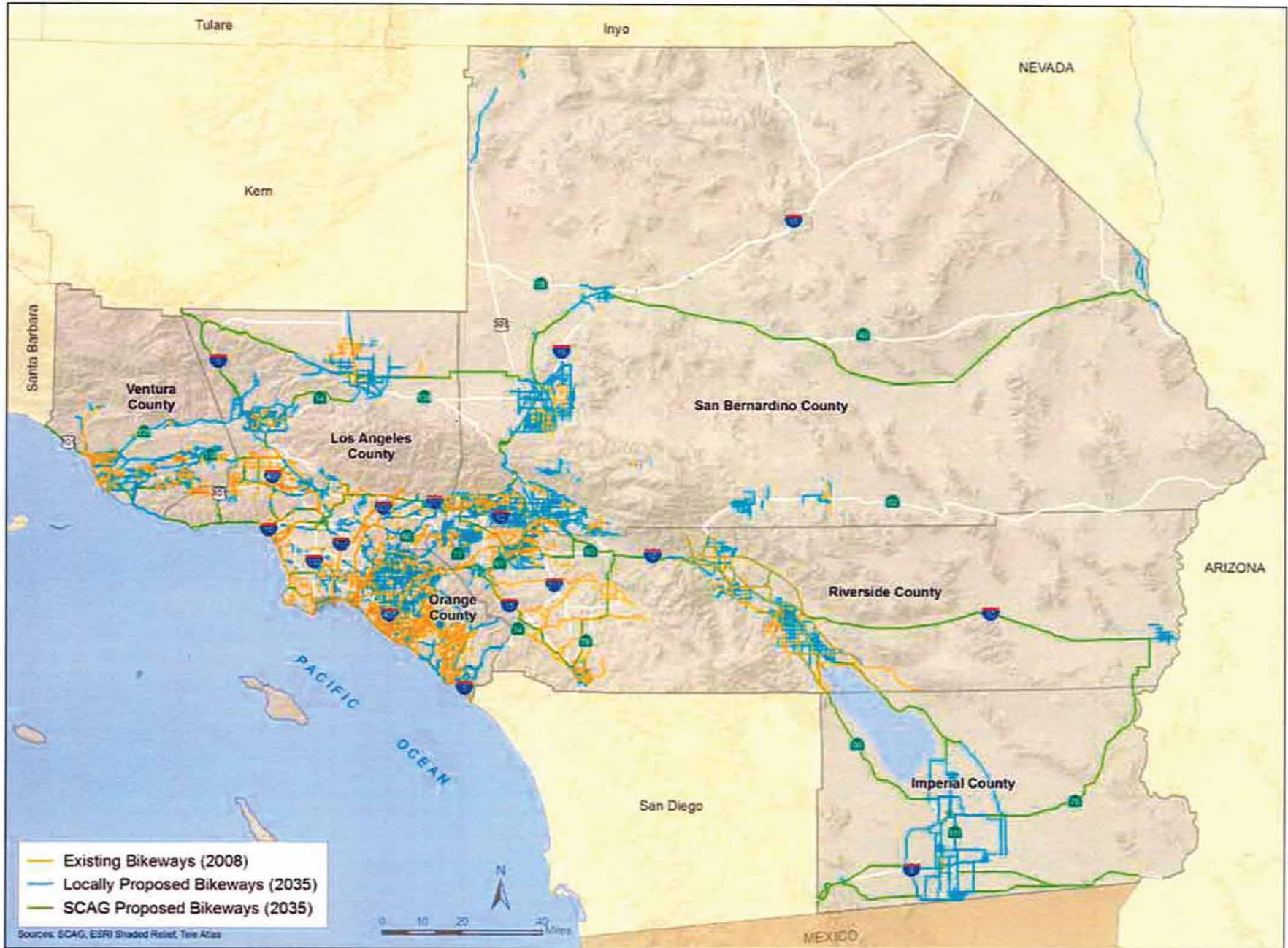


EXHIBIT 4.12 Proposed Highway Improvements SCAG Region

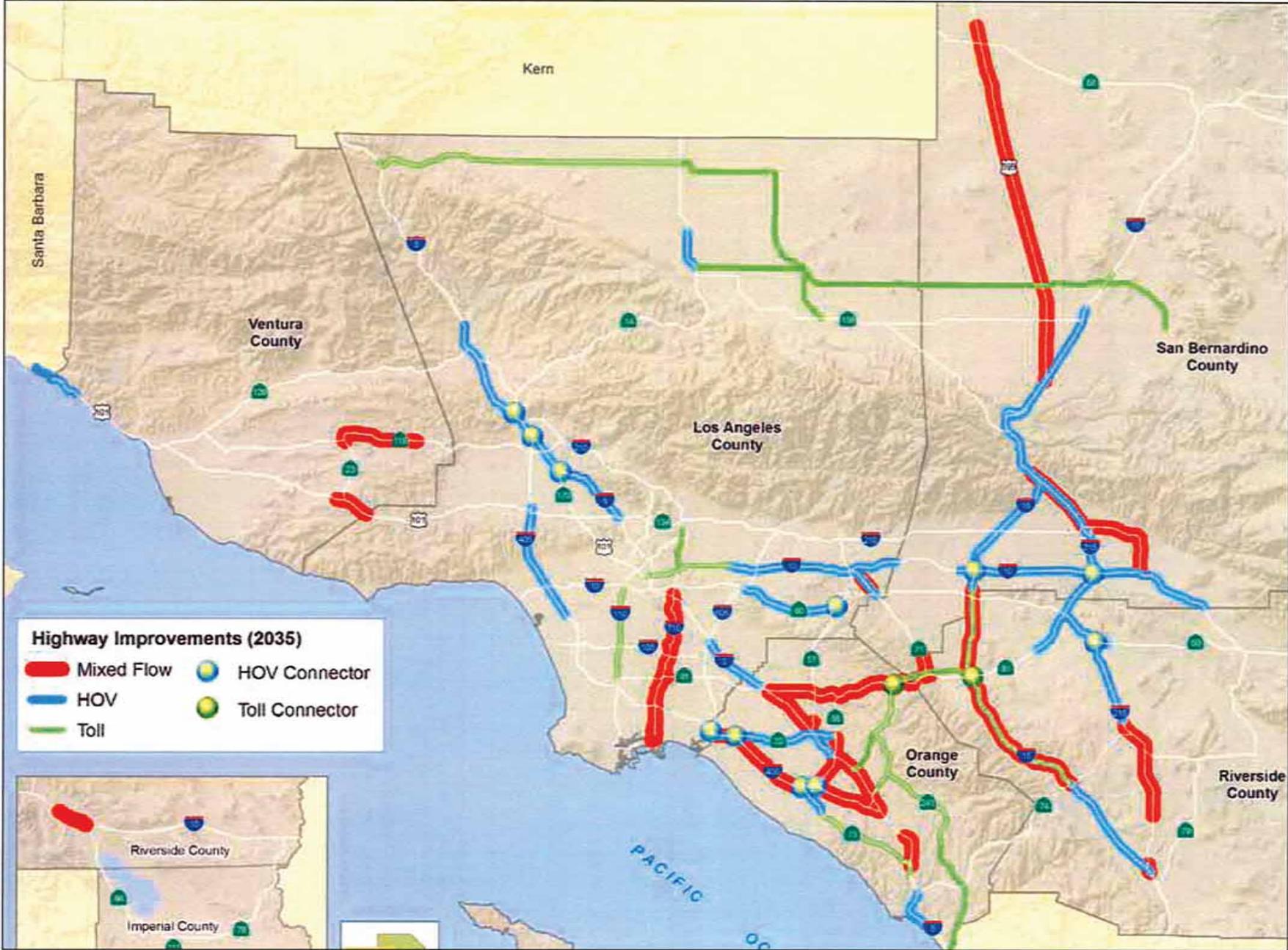




Image courtesy of City of Fullerton

Local Efforts

Fullerton Transportation Center and Corridor Redevelopment

The City of Fullerton has embraced sustainability as a framework for planning its future in both the transportation and land use arenas. Most notably, the area around the Fullerton Transportation Center is a model of transit-oriented design that encourages walking, bicycling and transit. The City's ongoing plans in this area continue to attract development of housing, restaurants, retail, and other amenities. Furthermore, its commitment to redeveloping its auto-oriented corridors serves to improve connections to nearby hospitals, schools and employment centers.

Long Beach Boulevard Corridor

Along the Long Beach Boulevard Corridor, out-of-date parking standards have hindered development and impacted housing affordability. To address this, the City of Long Beach began a multi-phase project to implement a new zoning code that facilitates transit-oriented development along the Metro Blue Line. The City also continues its commitment to respond to the changing needs of the area by seeking grant funding for new bike and pedestrian infrastructure.



Image courtesy of City of Long Beach

Temecula Old Town Specific Plan

For the residents of Temecula, Old Town represents a place where tradition and new opportunities combine to form the heart of the community. To support this vision, the City updated the Old Town Specific Plan to encourage a pedestrian-oriented, urban downtown that allows for a variety of land uses. The plan sets forth land use designations and development standards for more flexible and creative use of properties and provides for a balance between commercial and residential development in the area.

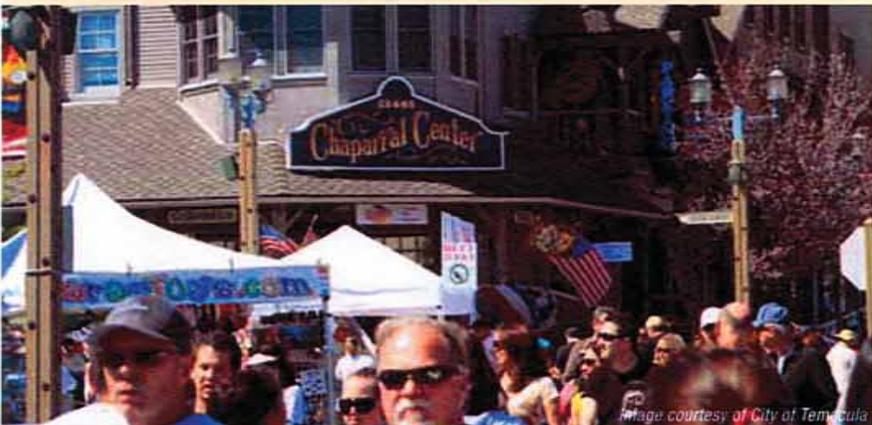


Image courtesy of City of Temecula

capacity of the transportation system by supporting a shift from single-occupancy vehicle use to other alternatives. Many local jurisdictions in our region have become national leaders in the implementation of TDM strategies. For example, SCAG is working with local jurisdictions to close the gaps in the regional bikeway network and bring 12,000 miles of deficient sidewalks into compliance with the Americans with Disabilities Act (ADA). TDM measures will receive a total of \$4 billion in available revenues compared to \$1.3 billion in 2008, which indicates a 200 percent increase.

The 2012 RTP/SCS employs the following TDM measures to improve mobility and access:

- Mileage-based user fees and cordon pricing
- Bringing the majority of sidewalks and intersections in our region into American Disabilities Act (ADA) compliance to increase the usability and effectiveness of our active transportation system.
- Promoting telecommuting and flexible work schedules
- Development of mobility hubs for first mile/last mile connectivity
- Expanding parking cash out programs in urban areas
- Promoting Guaranteed Ride Home Programs

Transportation System Management (TSM)

Transportation System Management (TSM) measures also support the goals of the RTP/SCS by seeking to identify improvements to increase capacity and improve operational efficiency. These techniques contribute to improved traffic flow, better air quality, and improved system accessibility and safety. The following TSM measures support the forecasted land use development pattern of the RTP/SCS:

- Enhanced incident management
- Advanced ramp metering
- Corridor System Management plans
- Traffic signal synchronization
- Improved data collection

Local Efforts

Ventura Downtown Parking Management District

In order to solve the apparent parking shortage in its downtown area, the City of Ventura performed a downtown parking study. The study revealed ample spaces were available in nearby city-owned lots, while other prime spaces in close proximity to local business were in high demand and always occupied. Local business employees were parking in spaces most coveted by customers and patrons. The city of Ventura was able to identify a solution to the problem: a flexible demand-responsive parking paid district. Parking in downtown Ventura has since improved, therefore contributing to a better downtown experience.

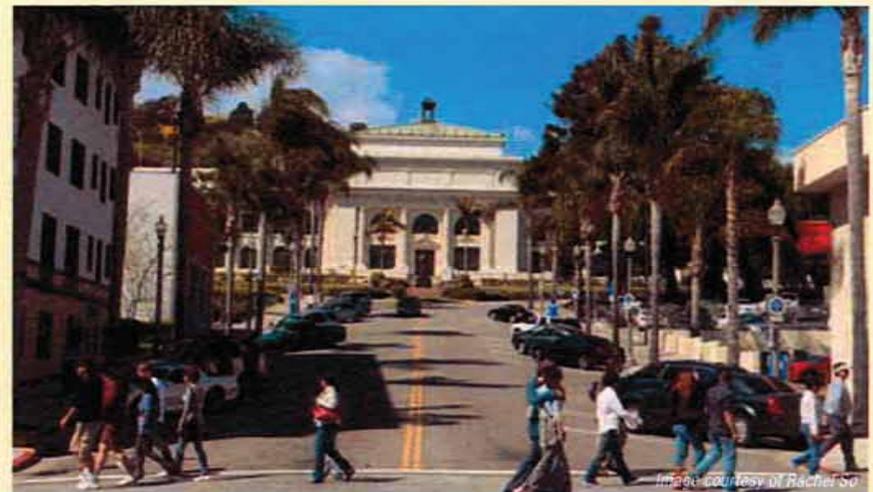


Image courtesy of Rachel So

Transportation Conformity

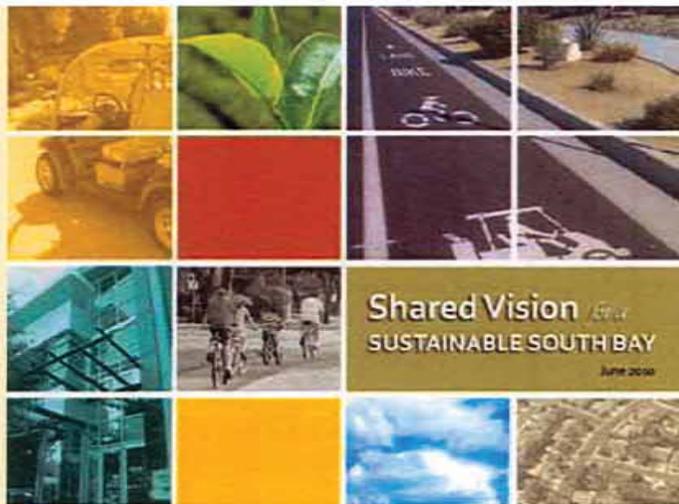
The policy objectives and strategies set forth in the RTP/SCS are aimed at reducing travel distances and providing additional travel choices to the automobile. As such, in accordance with Govt. Code section 65080(b)(2)(B)(viii), the RTP/SCS complies with the conformity requirements of the Clean Air Act as further detailed in Appendix 3.

OVERALL LAND USE PATTERN MAPS

The following maps, **EXHIBIT 4.13** through **EXHIBIT 4.19**, identify the RTP/SCS overall forecasted land use pattern for the region and its counties in 2035. The RTP/SCS land use development pattern accommodates over 50 percent of new housing and employment growth in High-Quality Transit Areas (HQTA), while keeping jurisdictional totals consistent with local input. It moves the region towards more compact, mixed-use development leading to more opportunities for walking and biking, more transit use, and shorter auto trips. The Community Types used meet the demand for a broader range of housing types, including the development of smaller-lot single family homes, townhomes, and multi-family condominiums and apartments. The detailed underlying data for these maps that represents the general location of uses, residential densities and building intensities can be found in Appendix 19 pursuant to Govt. Code section 65080(b)(2)(B)(i).



Photograph courtesy of Jessica Meaney, Safe Routes to School



Local Efforts

South Bay Cities Council of Governments Neighborhood Oriented Design Program

The South Bay Cities Council of Governments adopted the Sustainable South Bay Strategy in September 2010 to promote sustainable land use and transportation investment in the South Bay. Founded on the concept of Neighborhood Oriented Development (NOD), this plan will create compact, mixed commercial nodes in the center of each residential neighborhood. Specifically, it sets forth a strategy that would intensify commercial uses at the corners of major arterials, transition mid-block strip commercial to residential, and encourage street-fronting buildings with parking at the rear. The resulting development pattern will provide a cluster of destinations within walking distance of every residence with mid-range trips accessible by local use (electric) vehicles.

EXHIBIT 4.13 Land Use Pattern SCAG Region (2035)



EXHIBIT 4.14 Land Use Pattern Ventura County (2035)

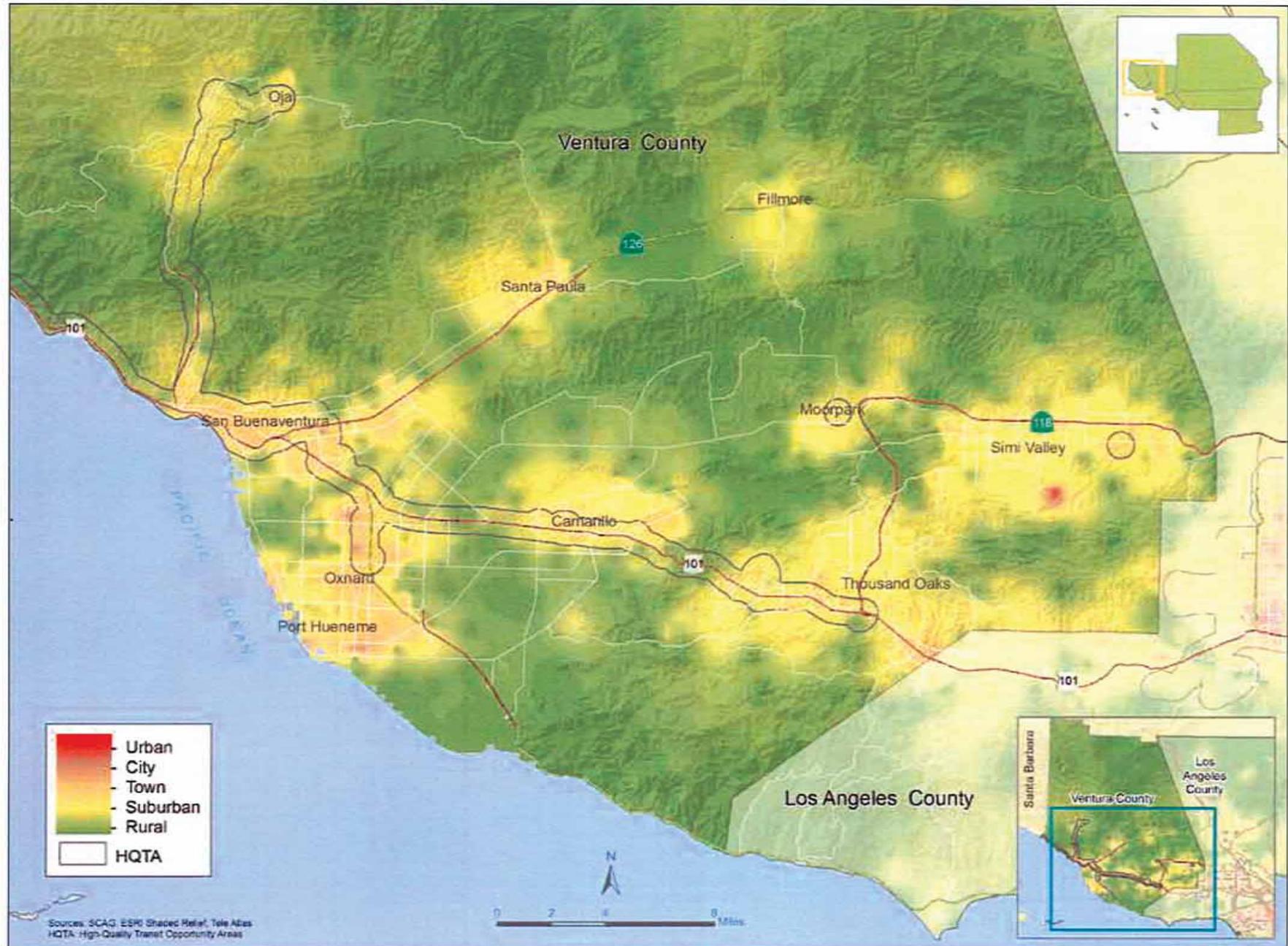


EXHIBIT 4.15 Land Use Pattern Los Angeles County (2035)

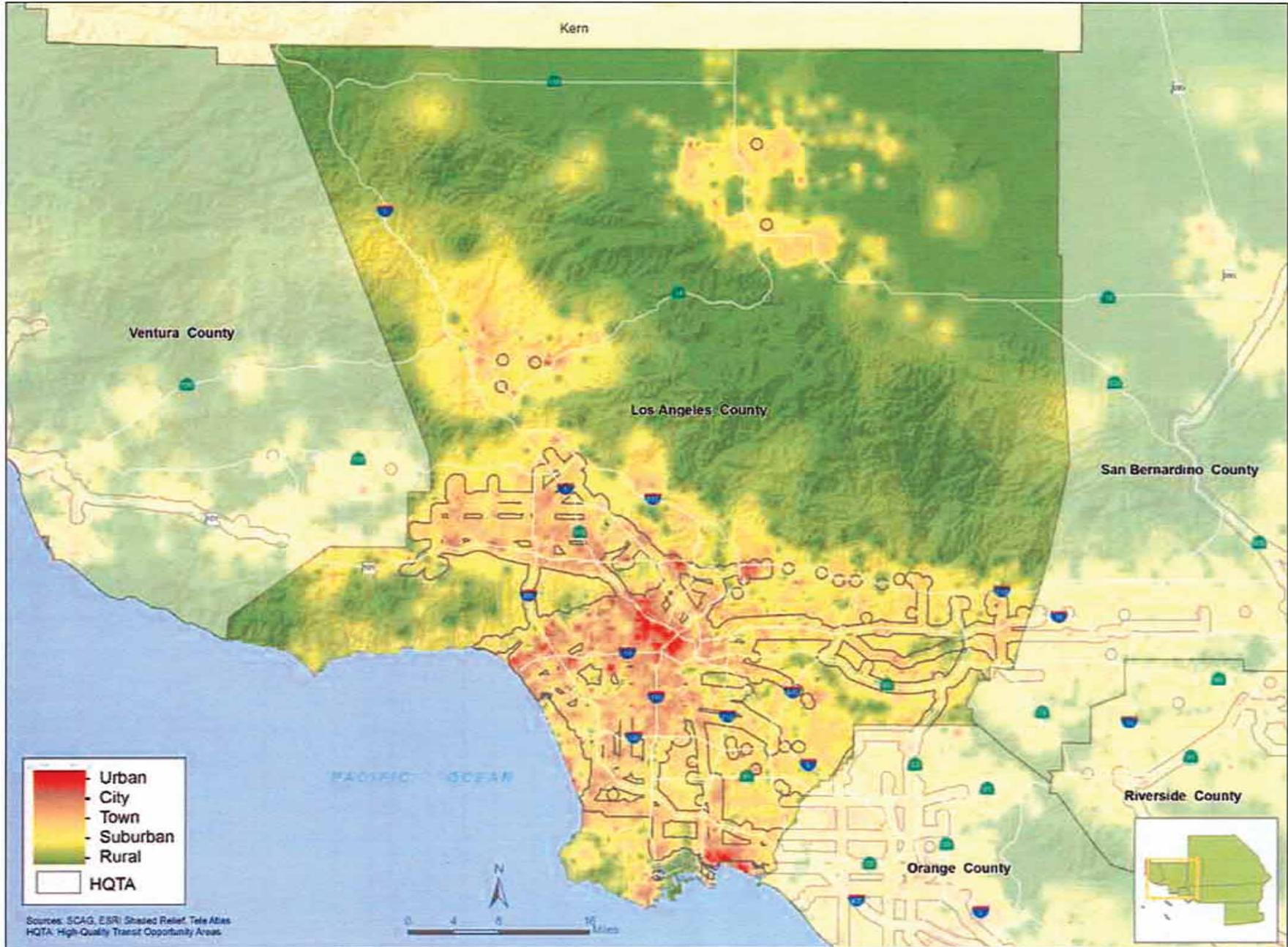


EXHIBIT 4.16 Land Use Pattern San Bernardino County (2035)

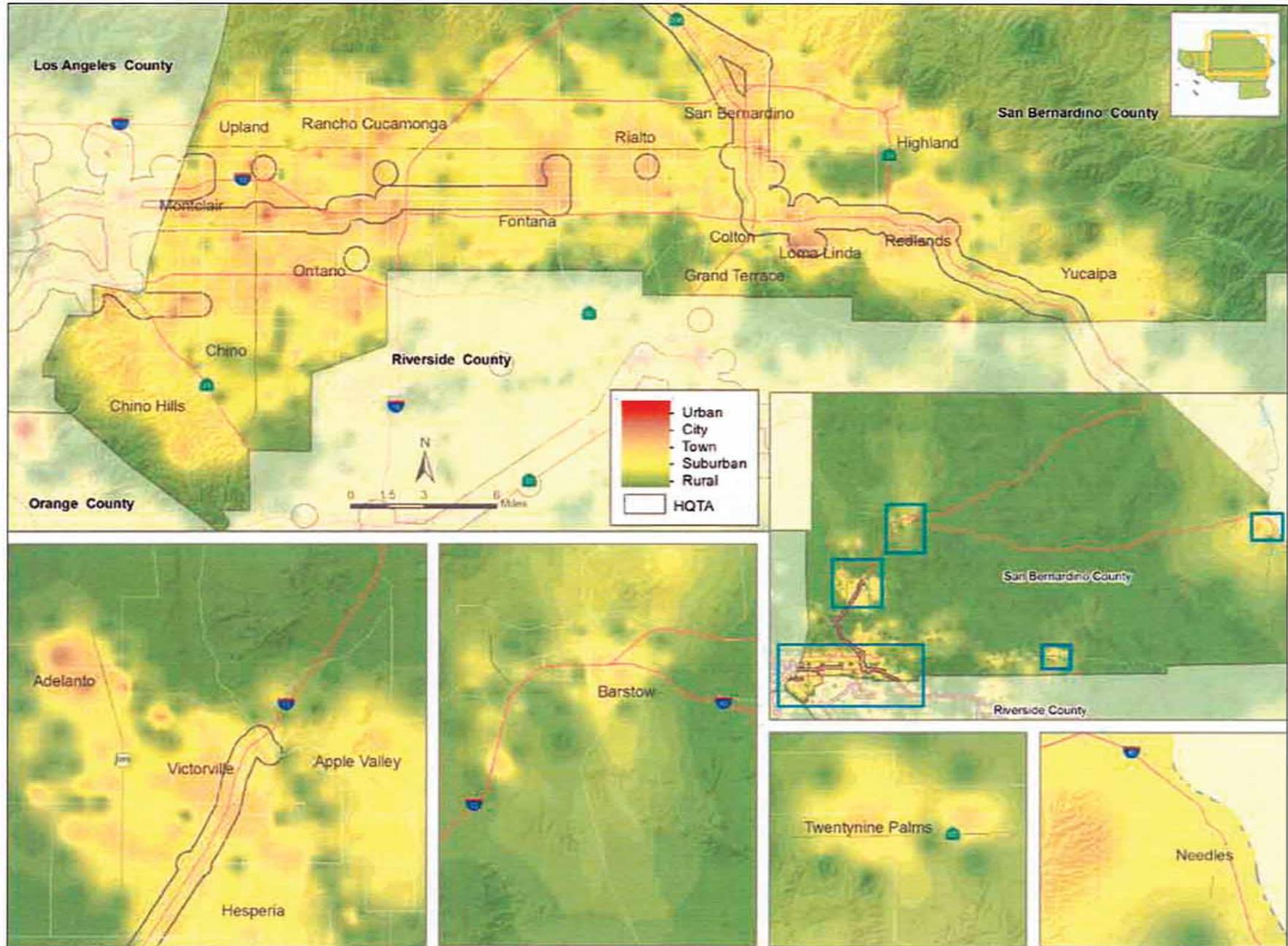


EXHIBIT 4.17 Land Use Pattern Orange County (2035)



EXHIBIT 4.18 Land Use Pattern Riverside County (2035)

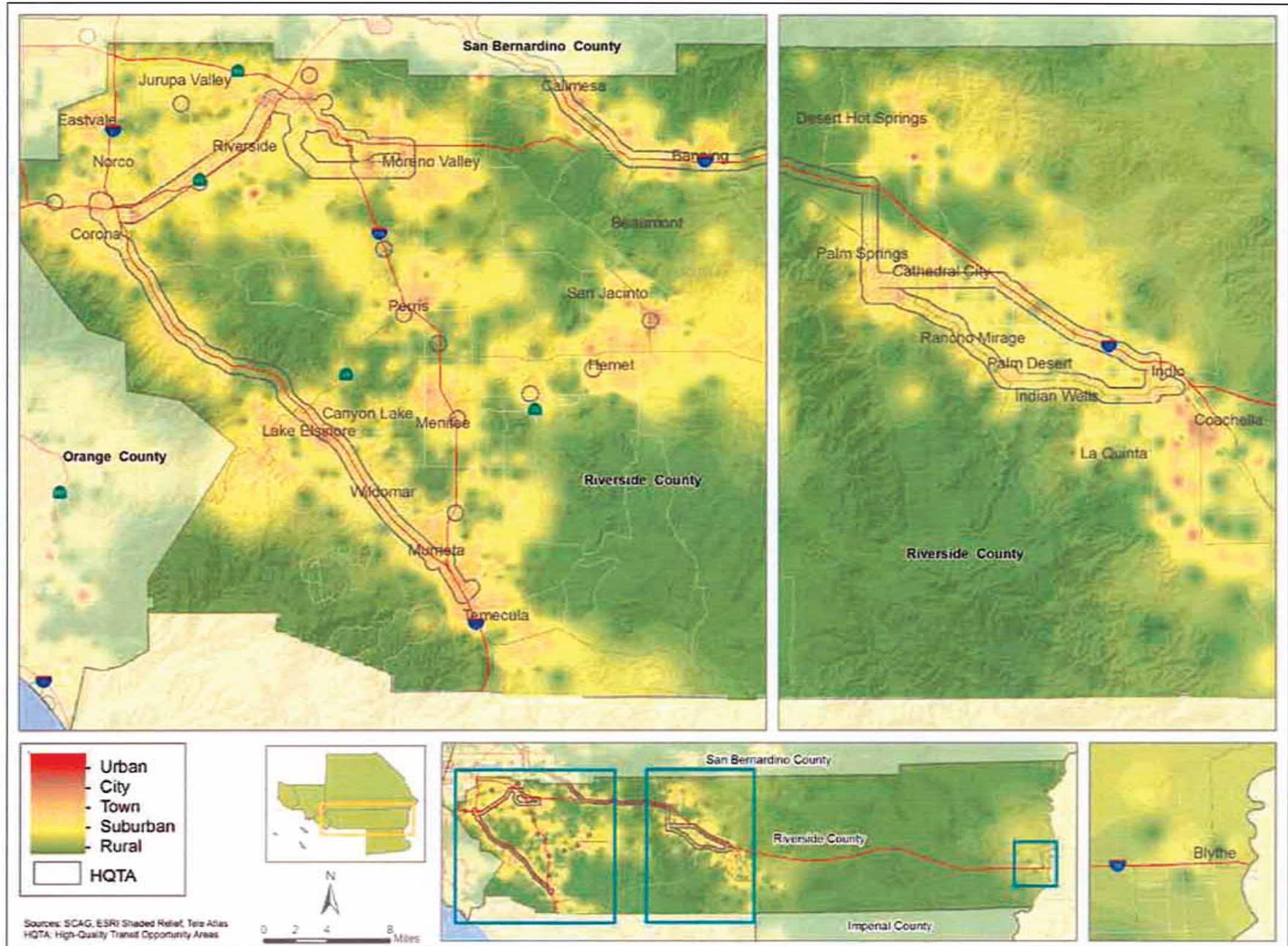
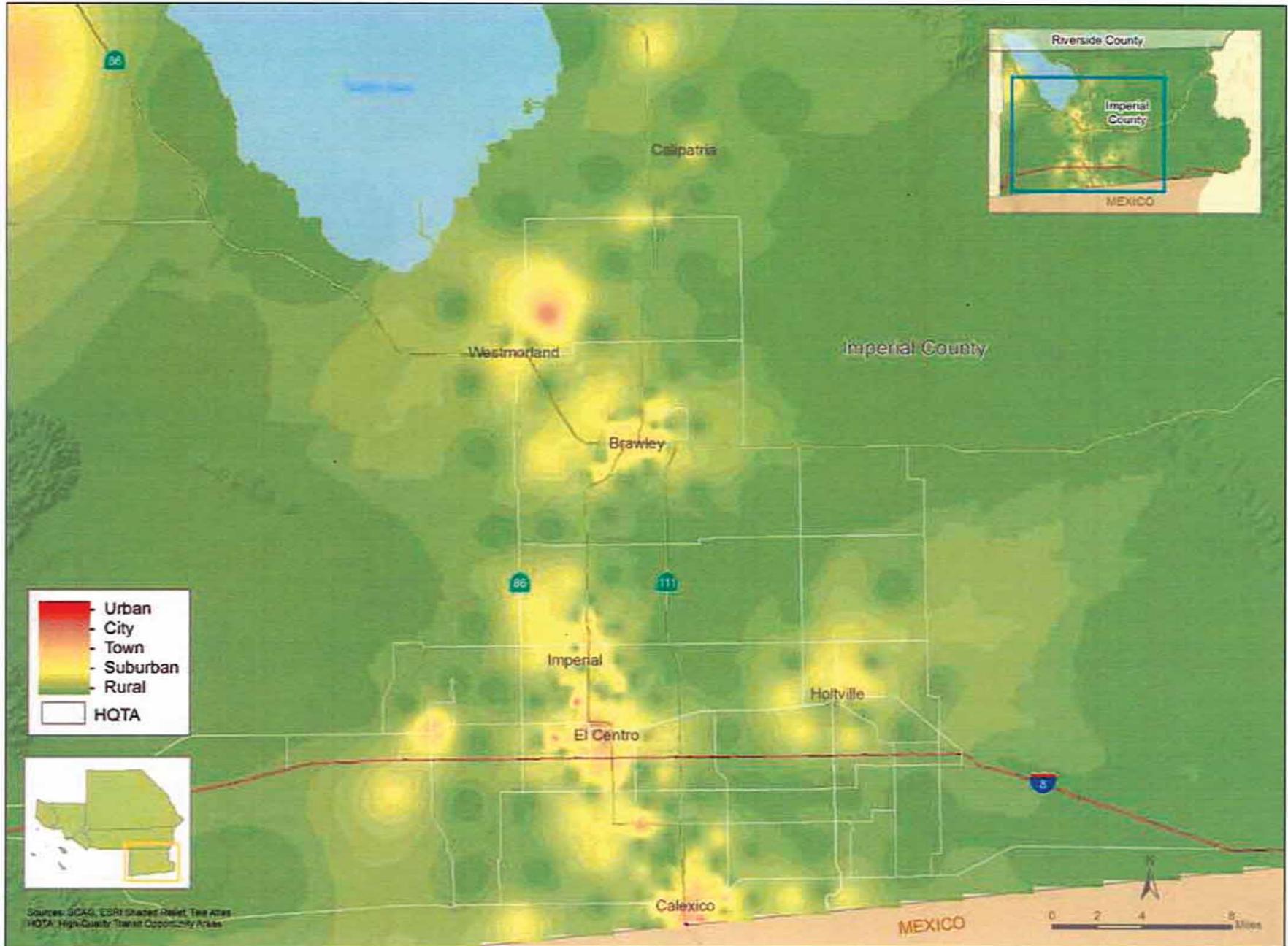


EXHIBIT 4.19 Land Use Pattern Imperial County (2035)



CEQA Incentive

SB 375 provides incentives in the form of CEQA streamlining to encourage community design that supports reduction in per capita GHG emissions. Generally, two types of projects are eligible for streamlined CEQA review once a compliant RTP/SCS has been adopted: (1) residential/mixed use projects (consistent with the SCS) or (2) a Transit Priority Project (TPP). See Appendix 19 for more information on CEQA streamlining incentives through SB 375.

Residential/Mixed-Use Projects

Residential and mixed-use projects that are consistent with the SCS qualifies for streamlined CEQA review if at least 75 percent of the total building square footage consists of residential use (or a project that is a TPP). If a project meets these requirements, any environmental review conducted will not be required to discuss growth inducing impacts, any project specific or cumulative impacts from cars and light duty truck trips generated by the project upon its completion on climate change or the regional transportation network; or a reduced density alternative.

Transit Priority Projects (TPP)

A Transit Priority Project (TPP) is eligible for CEQA streamlining if it is consistent with the SCS; contains at least 50 percent residential use; is proposed to be developed at a minimum 20 dwelling units per acre; and is located within ½ mile of a major transit stop or high quality transit corridor that is included in the RTP. If a project meets these criteria, it may be analyzed under a new environmental document created by SB 375, called the Sustainable Communities Environmental Assessment (SCEA), or through an EIR for which the content requirements have been reduced. Additionally, a TPP can be considered a Sustainable Communities Project (SCP) and be eligible for a new full CEQA exemption if it meets further requirements beyond the base criteria.

The land use input for the SCS was created with the use of Traffic Analysis Zones (TAZ) and Community/Development Types. The Community/

Development Types used in the SCS do not represent detailed, parcel-level land use designations such as those found within a local jurisdiction's General Plan, but rather represent the aggregation of multiple land uses, densities and intensities that are expected to preponderate or average out within a neighborhood-sized area by 2035. Each Community/Development Type is comprised of various characteristics related to employment and housing density, urban design, mix of land uses, and transportation options. Details describing the characteristics contained within each Community/Development Type are available in Appendix 19.

The Community/Development Types are expressed in terms of use designations, densities and building intensities; and, for any given type, there is one residential density indicated. For example, the "Town Center" Community Type reflects a projection of 21.68 residential units per acre. It is important to note that the designation is a potential ultimate average for the TAZ—and is not an absolute project-specific requirement that must be met in order to determine consistency with the SCS. In other words, the SCS was not developed with the intent that each project to be located within any given TAZ must exactly equal the density and relative use designations that are indicated by the SCS community type in order for the project to be found consistent with the SCS's use designation, density, building intensity and applicable policies. Instead, any given project, having satisfied all of the statutory requirements of either a residential//mixed-use project or TPP project as described above, approved within a TAZ may be deemed by the lead agency to be consistent with the SCS so long as the project does not negate the possibility that the average of all land uses within the TAZ, when they are ultimately built out consistent with reasonable local planning and zoning assumptions, nonetheless can potentially achieve the average densities and uses indicated by the community type.

RTP/SCS Next Steps

The 2012 RTP/SCS is first and foremost a transportation plan. However, the transportation network in the RTP/SCS and the growth patterns envisioned in the Plan Alternative must complement each other. Integration of transportation and land use is essential for improved mobility and access to transportation options.

SB 375 calls for the integration of land use policies with transportation investments, and asks that Metropolitan Planning Organizations identify, quantify to the extent possible, and highlight these co-benefits throughout the processes.

To achieve the goals of the RTP/SCS, public agencies at all levels of government will need to implement a wide range of strategies that focus on four key areas:

- A Land Use growth pattern that accommodates the region's future employment and housing needs, and protects sensitive habitat and natural resource areas;
- A Transportation Network that consists of public transit, highways, local streets, bikeways and walkways;

- Transportation Demand Management (TDM) measures that reduce or eliminate peak-period demand on the transportation network; and
- Transportation System Management (TSM) measures that maximize the efficiency of the transportation network.

The following tables list specific implementation strategies that local governments, SCAG and other stakeholders can and should undertake in order to successfully implement the SCS.



Image courtesy of City of Ontario

Local Efforts

Ontario New Model Colony General Plan

Since 1998, the City of Ontario has been developing a bold vision for its future growth, including the adoption of its General Plan and 3,303 acres of former agricultural land into its Sphere of Influence. The City's recent plans call for 13,000 new housing units across a broad range of housing types and a mix of business spaces oriented towards three mixed-use centers that are served by pedestrian-friendly roadways and a large central park. Emphasizing connections to corridors and transit, the City is creating a major regional center for Southern California.

TABLE 4.3 Land Use Actions and Strategies

| Proposed Action/Strategy | Responsible Parties |
|---|----------------------------------|
| Coordinate ongoing visioning efforts to build consensus on growth issues among local governments and stakeholders | SCAG |
| Provide incentives and technical assistance to local governments to encourage projects and programs that balance the needs of the region | SCAG |
| Collaborate with local jurisdictions and agencies to acquire a regional fair share housing allocation that reflects existing and future needs | SCAG, Local Jurisdictions, HCD |
| Expand Compass Blueprint program to support member cities in the development of bicycle, pedestrian, Safe Routes to Schools, Safe Routes to Transit, and ADA Transition plans. | SCAG, State |
| Collaborate with the region's public health professionals to enhance how SCAG addresses public health issues in its regional planning, programming, and project development activities. | SCAG, State |
| Seek partnerships with state, regional and local agencies to acquire funding sources for innovative planning projects | Local Jurisdictions, SCAG, State |
| Update local zoning codes, General Plans, and other regulatory policies to accelerate adoption of land use strategies included in the RTP/SCS Plan Alternative | Local Jurisdictions |
| Pursue joint development opportunities to encourage the development of housing and mixed-use projects around existing and planned rail stations or along high-frequency bus corridors, and in transit-oriented development. | Local Jurisdictions, CTCs |
| Working with local jurisdictions, identify resources that can be used for employing strategies to maintain and assist in the development of affordable housing. | SCAG, Local Jurisdictions |
| Consider developing healthy community or active design guidelines that promote physical activity and improved health | Local Jurisdictions |
| Support projects, programs, policies and regulations to protect resources areas, such as natural habitats and farmland, from future development | Local Jurisdictions, SCAG |

| Proposed Action/Strategy | Responsible Parties |
|--|---------------------|
| Create incentives for local jurisdictions and agencies that support land use policies and housing options that achieve the goals of SB 375 | State |
| Continue partnership with regional agencies to increase availability of state funding for integrated land use and transportation projects in the region | State, SCAG |
| Engage in a strategic planning process to determine the critical components and implementation steps for identifying and addressing open space resources | SCAG |
| Identify and map regional priority conservation areas for potential inclusion in future plans. | SCAG |
| Engage with various partners, including CTCs and local agencies, to determine priority conservation areas and develop an implementable plan. | SCAG, CTCs |
| Develop regional mitigation policies or approaches for the 2016 RTP | SCAG, CTCs |

TABLE 4.4 Transportation Network Actions and Strategies

| Proposed Action/Strategy | Responsible Parties |
|--|----------------------------------|
| Perform and support studies with the goal of identifying innovative transportation strategies that enhance mobility and air quality, and determine practical steps to pursue such strategies. | SCAG, CTCs |
| Cooperate with stakeholders, particularly county transportation commissions and Caltrans, to prioritize funding sources for preservation and maintenance of the existing transportation network. | SCAG, CTCs, Local Jurisdictions |
| Encourage the development of new transit modes in our subregions such as BRT, rail, limited-stop service, and point-to-point express services utilizing the HOV and HOT lane networks. | SCAG, CTCs, Local Jurisdictions |
| Encourage transit providers to increase frequency and span-of-service in TOD/HQTA and along targeted corridors where there is latent demand for transit usage. | SCAG, CTCs |
| Encourage regional and local transit providers to develop rail interface services at Metrolink, Amtrak and high-speed rail stations. | SCAG, CTCs, Local Jurisdictions |
| Expand the Toolbox Tuesdays program to include bicycle safety design, pedestrian safety design, ADA design, training on how to use available resources that expand understanding of where collisions are happening, and information on available grant opportunities to improve bicycle and pedestrian safety. | SCAG, State |
| Prioritize transportation investments to support compact infill development that includes a mix of land uses and housing options, where appropriate, to maximize the benefits for existing communities, especially vulnerable populations, and to minimize any negative impacts. | SCAG, CTCs, Local Jurisdictions |
| Explore and implement innovative strategies and projects that enhance mobility and air quality, including those that increase the walkability of communities and accessibility to transit via non-auto modes | SCAG, CTC's, Local Jurisdictions |

| Proposed Action/Strategy | Responsible Parties |
|--|---------------------------------|
| Collaborate with local jurisdictions to plan and develop residential and employment development around current and planned transit stations | SCAG, Local Jurisdictions |
| Collaborate with local jurisdictions to provide a network of local community circulators that serve new TOD and HQTAs, providing an incentive for residents and employees to make trips on transit | SCAG, CTCs, Local Jurisdictions |
| Similar to SCAG's partnership with the City of Los Angeles and LACMTA, offer to all County Transportation Commissions a mutually-funded, joint first mile/last mile study for each region. | SCAG, CTCs |
| Develop first-mile/last-mile strategies on a local level to provide an incentive for making trips by transit, bicycling or walking | CTCs, Local Jurisdictions |
| Encourage transit fare discounts and local vendor product and service discounts for residents and employees of TOD/HQTAs, or for a jurisdiction's local residents in general who have fare media | Local Jurisdictions |
| Work with transit properties and local jurisdictions to identify and remove barriers to maintaining on time performance | SCAG, CTCs, Local Jurisdictions |
| Develop policies and prioritize funding for strategies and projects that enhance mobility and air quality | State |
| Work with the California High-Speed Rail Authority and local jurisdictions to plan and develop optimal levels of retail, residential and employment development that fully takes advantage of new travel markets and rail travelers. | State |
| Lobby the state to provide funding for increased transit service in TOD/HQTA in support of reaching SB 375 goals. | SCAG, State |
| Continue to work with neighboring Metropolitan Planning Organizations to provide alternative modes for interregional travel, including Amtrak and other passenger rail services. | SCAG, State |

TABLE 4.5 Transportation Demand Management (TDM) Actions and Strategies

| Proposed Action/Strategy | Responsible Parties |
|---|----------------------------------|
| Examine major projects and strategies that reduce congestion and emissions, and optimize the productivity and overall performance of the transportation system | SCAG |
| Develop comprehensive regional active transportation network along with supportive tools and resources that can help jurisdictions plan and prioritize new active transportation projects in their cities | SCAG, CTCs, Local Jurisdictions |
| Encourage the implementation of a Complete Streets policy | SCAG, CTCs |
| Support work-based programs that encourage emission reduction strategies | SCAG, Local Jurisdictions |
| Develop infrastructure plans and educational programs to promote active transportation options | Local Jurisdictions |
| Encourage the development of telecommuting programs by employers through review and revision of policies that may discourage alternative work options | Local Jurisdictions, CTCs |
| Emphasize active transportation projects as part of complying with the Complete Streets Act (AB 1358) | State, SCAG, Local Jurisdictions |

TABLE 4.6 Transportation System Management (TSM) Actions and Strategies

| Proposed Action/Strategy | Responsible Parties |
|--|----------------------------------|
| Work with relevant state and local transportation authorities to increase the efficiency of the existing transportation system | SCAG, Local Jurisdictions, State |
| Collaborate with local jurisdictions to develop regional policies regarding TSM | SCAG, Local Jurisdictions |
| Contribute to and utilize regional data sources to ensure efficient integration of the transportation system | SCAG, CTCs |
| Provide training opportunities for local jurisdictions on TSM strategies, such as Intelligent Transportation Systems (ITS) | SCAG, Local Jurisdictions |
| Collaborate with local jurisdictions to continually update the ITS inventory | SCAG, Local Jurisdictions |
| Collaborate with CTCs to regularly update the county and regional ITS architecture | SCAG, CTCs, Local Jurisdictions |
| Collaborate with the State and Federal Government to examine potential innovative TDM strategies. | SCAG, State |

Other Supportive Strategies

REGIONAL AND LOCAL EFFORTS TO ADOPT CLEAN VEHICLE TECHNOLOGY

SCAG is leading a regional effort with the goal of accelerating fleet conversion to electric and other zero-emission transportation technologies. To accommodate the anticipated increase in Plug-In Electric Vehicles (PEV), a significant expansion of charging infrastructure is needed throughout the region, among other preparedness steps. In response to PEV market forecasts, SCAG has developed a robust work program to prepare for the influx of PEVs, in collaboration with the South Coast Air Quality Management District, Southern California Edison, Western Riverside Council of Governments (WRCOG), the South Bay Cities Council of Governments (SBCCOG) and a wide array of stakeholders.

With funding assistance from the U.S. Department of Energy and the California Energy Commission, SCAG will develop a Regional PEV Readiness Plan with two complementary subregional plans for WRCOG and SBCCOG. The subregional plans will serve as models for other subregions as they begin to develop their own PEV Readiness Plans. A key outcome of the planning effort will be charge port infrastructure plans including updated maps of prime charging locations and strategies for accelerating the deployment of PEV charging equipment. It will include best practices for “PEV-ready” buildings and guidelines for streamlining the permitting, installation and inspection of charging equipment. The goal is to promote wider adoption of alternatively fueled vehicles to reduce the use of fossil fuels, improve air quality and simultaneously reduce GHG emissions in the SCAG region and the state.

In response, the 2012 RTP/SCS supports the increased adoption of near zero and zero emission technologies. This RTP/SCS includes policies supporting and promoting the introduction of electric and other zero-emission vehicles, commits to the work program and pending studies as part of an implementation effort to facilitate acceleration of fleet turnover, and estimates the impact of regional, subregional, and local activities on transportation GHG in the region. Additional information regarding air quality and energy is included in Chapter 1 and Appendix 21.

TABLE 4.7 Clean Vehicle Technology Actions and Strategies

| Proposed Action/Strategy | Responsible Parties |
|---|---------------------------|
| Develop a Regional PEV Readiness Plan with a focus on charge port infrastructure plans to support and promote the introduction of electric and other zero-emission vehicles in Southern California | SCAG |
| Support subregional strategies to develop infrastructure and supportive land uses to accelerate fleet conversion to electric technologies. The activities committed in the two subregions (Western Riverside COG and South Bay Cities COG) are put forward as best practices that others can adopt in the future (See Appendix 21 for more information) | SCAG, Local Jurisdictions |

Evaluation and Revision

SCAG will update its RTP/SCS in 2016, in accordance with applicable federal and state laws. As part of this update, SCAG will be reviewing its progress in implementing the strategies identified in this plan. In addition, the GHG emission reduction targets are reevaluated at least every eight years, and may be revised every four years by CARB. This will enable the state and SCAG to consider changes in circumstances, funding availability, technological advances, new legislation, and other considerations that could arise over time.

SCAG will also track its progress in implementing its RTP/SCS strategies in conjunction with the preparation and adoption of its Overall Work Program and Annual Budget. The OWP / Budget process provides an opportunity for SCAG to allocate staff resources and funding to implement short-term and mid-term strategies contained within the RTP/SCS. In addition, SCAG will periodically monitor the progress being made by the State, the CTCs, local jurisdictions, and other agencies and entities in implementing the strategies identified in this plan.

Monitoring Progress

While SB 375 places a great deal of attention on meeting GHG emission reduction targets, SCAG has also established other important goals in its RTP/SCS that will lead to overall improvement in the quality of life in the region. It will be important for SCAG to continue to improve its performance monitoring programs, such as the State of the Region report, etc., to track how well the region is doing in terms of overall progress toward meeting these goals.

Sustainable Communities Strategy Requirements Matrix

The following table outlines the requirements of SB 375 and how each is addressed in the 2012 RTP/SCS.

TABLE 4.8 Sustainable Communities Requirements Matrix

| Required Element | Addressed |
|--|--|
| <p>CGC Section 65080(b) (2).(B) <i>Each metropolitan organization shall prepare a sustainable communities strategy, subject to the requirements of Part 450 of Title 23 of, and Part 93 of Title 40 of, the Code of Federal Regulations, including the requirement to utilize the most recent planning assumptions considering local general plans and other factors.</i></p> | <p>The RTP/SCS complies with all requirements.</p> <p>Reference: 2012 RTP/SCS Chapter 4: Sustainable Communities Strategy, p. 105</p> |
| <p>CGC Section 65080(b) (2).(B) i. <i>Identify the general location of uses, residential densities, and building intensities within the region</i></p> | <p>The SCS identifies the future land use pattern of the SCAG region in Exhibit 4.13-Exhibit 4.19, and additional exhibits in Appendix 19. Residential densities and building intensities are determined by community types, which are made-up of information relating to the characteristics of the landscape including jobs and housing density, urban design and mix of land uses.</p> <p>Reference: 2012 RTP/SCS Chapter 4: Sustainable Communities Strategy, p. 117 2012 RTP/SCS Appendix 19: SCS Background Documentation 2012 RTP/SCS Appendix 4: Integrated Growth Forecast</p> |
| <p>CGC Section 65080(b) (2).(B) ii. <i>Identify areas within the region sufficient to house all the population of the region, including all economic segments of the population, over the course of the planning period of the regional transportation plan taking into account net migration into the region, population growth, household formation and employment growth</i></p> | <p>The SCS identifies areas sufficient to house the entire population in the region in Exhibit 4.13-Exhibit 4.19, and additional exhibits in Appendix 19. Projected capacity for these areas utilized the Integrated Growth Forecast for population, jobs, and households as contained in Appendix 4. Table 4.1 and Table 4.2 show projected housing capacity by community type for 2020 and 2035.</p> <p>Reference: 2012 RTP/SCS Chapter 4: Sustainable Communities Strategy, p. 123 2012 RTP/SCS Appendix 19: SCS Background Documentation 2012 RTP/SCS Appendix 4: Integrated Growth Forecast</p> |
| <p>CGC Section 65080(b) (2).(B) iii. <i>Identify areas within the region sufficient to housing an eight-year projection of the regional housing need for the region pursuant to Section 65584</i></p> | <p>The SCS identifies areas sufficient to house an eight-year projection of the regional housing need in Exhibit 4.13-Exhibit 4.19, and additional exhibits in Appendix 19. Table 4.1 and Table 4.2 show projected housing capacity by community type for 2020 and 2035.</p> <p>Reference: 2012 RTP/SCS Chapter 4: Sustainable Communities Strategy, p. 123 2012 RTP/SCS Appendix 19: SCS Background Documentation</p> |

| Required Element | Addressed |
|---|--|
| <p>CGC Section 65080(b) (2).(B) iv. <i>Identify a transportation network to service the transportation needs of the region</i></p> | <p>The SCS identifies the regional transportation network in Exhibit 4.10, Exhibit 4.11, and Exhibit 4.12. Detailed descriptions of SCAG's transportation network is found in Chapter 2 of the 2012 RTP.</p> <p>Reference: 2012 RTP/SCS Chapter 4: Sustainable Communities Strategy, p. 128 2012 RTP/SCS Chapter 2: Transportation Investments, p. 36</p> |
| <p>CGC Section 65080(b) (2).(B) v. <i>Gather and consider the best practically available scientific information regarding resource areas and farmland in the region as defined in subdivisions (a) and (b) of Section 65080.01</i></p> | <p>The SCS lists sources for the best available scientific information regarding resource areas and farmland in the region, and identifies these areas in Exhibit 4.6, Exhibit 4.7 and Exhibit 4.8.</p> <p>Reference: 2012 RTP/SCS Chapter 4: Sustainable Communities Strategy, p. 128 2012 RTP/SCS Chapter 2: Transportation Investments, p. 77</p> |
| <p>CGC Section 65080(b) (2).(B) vi. <i>Consider the state housing goals specified in Sections 65580 and 65581</i></p> | <p>Reference: 2012 RTP/SCS Chapter 4: Sustainable Communities Strategy, p. 106 2012 RTP/SCS Appendix 19: SCS Background Documentation</p> |
| <p>CGC Section 65080(b) (2).(B) vii. <i>Set forth a forecasted development pattern for the region, which, when integrated with the transportation network, and other transportation measures and policies, will reduce the greenhouse gas emissions from automobiles and light trucks to achieve, if there is a feasible way to do so, the greenhouse gas emission reduction targets approved by the state board</i></p> | <p>Exhibit 4.13-Exhibit 4.19 of the SCS identifies the forecasted development pattern for the region. Along with the identified transportation network in Exhibit 4.10-Exhibit 4.12, the identified land use pattern achieves the GHG emission reduction targets of 8% in 2010 and 13% in 2035. Detailed analysis and performance results of the integrated land use pattern and transportation network and strategies is found in Chapter 5 and Appendix 17.</p> <p>Reference: 2012 RTP/SCS Chapter 4: Sustainable Communities Strategy, p. 139 2012 RTP/SCS Chapter 5: Measuring Up, p. 161 2012 RTP/SCS Appendix XX (Modeling) 2012 RTP/SCS Appendix 17: Performance Measures</p> |
| <p>CGC Section 65080(b) (2).(B) viii. <i>Allow the regional transportation plan to comply with Section 176 of the federal Clean Air Act (42 U.S.C. Sec. 7506)</i></p> | <p>Reference: 2012 RTP/SCS Chapter 4: Sustainable Communities Strategy, p. 139 2012 RTP/SCS Appendix 3: Transportation Conformity</p> |
| <p>CGC Section 65080(b) (2).(D) <i>The metropolitan planning organization shall conduct at least two informational meetings in each county within the region for members of the board of supervisors and city councils on the sustainable communities strategy and alternative planning strategy.</i></p> | <p>Reference: 2012 RTP/SCS Chapter 6: Public Participation Plan, p. 191 2012 RTP/SCS Appendix 16: Public Participation</p> |

| Required Element | Addressed |
|--|--|
| <p>CGC Section 65080(b) (2).(E) Each metropolitan planning organization shall adopt a public participation plan, for development of the sustainable communities strategy and an alternative planning strategy, if any, that includes the following:</p> | <p>Reference: 2012 RTP/SCS Chapter 6: Public Participation Plan, p. 191 2012 RTP/SCS Appendix 16: Public Participation</p> |
| <p>(i) Outreach efforts to encourage active participation of a broad range of stakeholder groups in the planning process, consistent with the agency's adopted Federal Public Participation Plan, including, but not limited to, affordable housing advocates, transportation advocates, neighborhood and community groups, environmental advocates, home builder representatives, broad-based business organizations, landowners, commercial property interest, and homeowner associations.</p> | <p>The RTP/SCS details planning efforts that comply with and exceed the requirements. SCAG met extensively with partner agencies, non-profit, advocacy, neighborhood and community groups beginning with target setting consultation and continuing through the workshop process.</p> <p>Reference: 2012 RTP/SCS Chapter 6: Public Participation Plan, p. 191 2012 RTP/SCS Appendix 16: Public Participation</p> |
| <p>(ii) Consultation with congestion management agencies, transportation agencies, and transportation commissions.</p> | <p>Reference: 2012 RTP/SCS Chapter 6: Public Participation Plan, p. 191 2012 RTP/SCS Appendix 16: Public Participation</p> |
| <p>(iii) Workshops throughout the region to provide the public with the information and tools necessary to provide clear understanding of the issues and policy choices. At least one workshop shall be held in each county in the region. For counties with a population greater than 500,000, at least three workshops shall be held. Each workshop, to the extent practicable shall include urban simulation computer modeling to create visual representation of the sustainable communities strategy and the alternative planning strategy.</p> | <p>The RTP/SCS details planning efforts that comply with and exceed the requirements. SCAG held 18 workshops throughout the region, in addition to countless local agency planning sessions.</p> <p>Reference: 2012 RTP/SCS Chapter 6: Public Participation Plan, p. 191 2012 RTP/SCS Appendix 16: Public Participation</p> |
| <p>(iv) At least three public hearings on the draft sustainable communities strategy in the regional transportation plan and alternative planning strategy, if one is prepared. If the metropolitan transportation organization consists of a single county, at least two public hearings shall be held. To the maximum extent feasible, the hearings shall be in different parts of the region to maximize the opportunity for participation by members of the public throughout the region.</p> | <p>Reference: 2012 RTP/SCS Chapter 6: Public Participation Plan, p. 191 2012 RTP/SCS Appendix 16: Public Participation</p> |
| <p>(vi) A process for enabling members of the public to provide a single request to receive notices, information and updates.</p> | <p>Reference: 2012 RTP/SCS Chapter 6: Public Participation Plan, p. 191 2012 RTP/SCS Appendix 16: Public Participation</p> |
| <p>CGC Section 65080(b) (2).(F) In preparing a sustainable communities strategy, the metropolitan planning organization shall consider spheres of influence that have been adopted by the local agency formation commissions within its region.</p> | <p>Reference: 2012 RTP/SCS Appendix 4: Integrated Growth Forecast</p> |

| Required Element | Addressed |
|---|--|
| <p>CGC Section 65080(b) (2).(G) <i>Prior to adopting a sustainable communities strategy, the metropolitan planning organization shall quantify the reduction in greenhouse gas emissions projected to be achieved by the sustainable communities strategy and set forth the difference, if any, between the amount of that reduction and the target for the region established by the state board.</i></p> | <p>Reference: 2012 RTP/SCS Chapter 4: Sustainable Communities Strategy, p. 105</p> |
| <p>CGC Section 65080(b) (2).(J) <i>Neither a sustainable communities strategy nor an alternative planning strategy regulates the use of land, nor, except as provided by subparagraph (I), shall either one be subject to any state approval. Nothing in a sustainable communities strategy shall be interpreted as superseding the exercise of the land use authority of cities and counties within the region. Nothing in this section shall be interpreted to limit the state board's authority under any other provision of law. Nothing in this section shall be interpreted to authorize the abrogation of any vested right whether created by statute or by common law. Nothing in this section shall require a city's or county's land use policies and regulations, including its general plan, to be consistent with the regional transportation plan or an alternative planning strategy. Nothing in this section requires a metropolitan planning organization to approve a sustainable communities strategy that would be consistent with Part 450 of Title 23 of, or Part 93 of Title 40 of, the Code of Federal Regulations and any administrative guidance under those regulations. Nothing in this section relieves a public or private entity or any person from compliance with any other local, state, or federal law.</i></p> | <p>The RTP/SCS complies with this general requirement</p> |
| <p>CGC Section 65080(b) (2).(K) <i>Nothing in this section requires projects programmed for funding on or before December 31, 2011, to be subject to the provisions of this paragraph if they (i) are contained in the 2007 or 2009 Federal Statewide Transportation Investment Program, (ii) are funded pursuant to Chapter 12.49 (commencing with Section 8879.20) of Division 1 of Title 2, or (iii) were specifically listed in a ballot measure prior to December 31, 2008, approving a sales tax increase for transportation projects. Nothing in this section shall require a transportation sales tax authority to change the funding allocations approved by the voters for categories of transportation projects in a sales tax measure adopted prior to December 31, 2010. For purposes of this subparagraph, a transportation sales tax authority is a district, as defined in Section 7252 of the Revenue and Taxation Code, that is authorized to impose a sales tax for transportation purposes.</i></p> | <p>The RTP/SCS complies with this general requirement</p> |

| Required Element | Addressed |
|---|---|
| <p>CGC Section 65080(b) (4).(C) <i>The metropolitan planning organization or county transportation agency, whichever entity is appropriate, shall consider financial incentives for cities and counties that have resource areas or farmland, as defined in Section 65080.01, for the purposes of, for example, transportation investments for the preservation and safety of the city street or county road system and farm to market and interconnectivity transportation needs. The metropolitan planning organization or county transportation agency, whichever entity is appropriate, shall also consider financial assistance for counties to address countywide service responsibilities in counties that contribute towards the greenhouse gas emission reduction targets by implementing policies for growth to occur within their cities.</i></p> | |
| <p>CGC Section 65080.1 <i>Each transportation planning agency designated under Section 29532 or 29532.1 whose jurisdiction includes a portion of the California Coastal Trail, or property designated for the trail, that is located within the coastal zone, as defined in Section 30103 of the Public Resources Code, shall coordinate with the State Coastal Conservancy, the California Coastal Commission, and the Department of Transportation regarding development of the California Coastal Trail, and each transportation planning agency shall include provisions for the California Coastal Trail in its regional plan, under Section 65080.</i></p> | |
| <p>CGC Section 65080.3</p> <p>(a) <i>Each transportation planning agency with a population that exceeds 200,000 persons may prepare at least one "alternative planning scenario" for presentation to local officials, agency board members, and the public during the development of the triennial regional transportation plan and the hearing required under subdivision (c) of Section 65080.</i></p> <p>(b) <i>The alternative planning scenario shall accommodate the same amount of population growth as projected in the plan but shall be based on an alternative to attempts to reduce the growth in traffic congestion, make more efficient use of existing transportation infrastructure, and reduce the need for costly future public infrastructure.</i></p> <p>(c) <i>The alternative planning scenario shall be developed in collaboration with a broad range of public and private stakeholders, including local elected officials, city and county employees, relevant interest groups, and the general public. In developing the scenario, the agency shall consider all of the following:</i></p> <p>(1) <i>Increasing housing and commercial development around transit facilities and in close proximity to jobs and commercial activity centers.</i></p> <p>(2) <i>Encouraging public transit usage, ridesharing, walking, bicycling, and transportation demand management practices.</i></p> <p>(3) <i>Promoting a more efficient mix of current and future job sites, commercial activity centers, and housing opportunities.</i></p> <p>(4) <i>Promoting use of urban vacant land and "brownfield" development.</i></p> <p>(5) <i>An economic incentive program that may include measures such as transit vouchers and variable pricing for transportation.</i></p> | <p>N/A</p> <p>The SCAG region has chosen to prepare an SCS, which is in Chapter 4 of the 2012 Regional Transportation Plan.</p> |

| Required Element | Addressed |
|--|-----------|
| <p><i>(d) The planning scenario shall be included in a report evaluating all of the following:</i></p> <ul style="list-style-type: none"> <i>(1) The amounts and locations of traffic congestion.</i> <i>(2) Vehicle miles traveled and the resulting reduction in vehicle emissions.</i> <i>(3) Estimated percentage share of trips made by each means of travel specified in subparagraph (C) of paragraph (1) of subdivision (b) of Section 65080.</i> <i>(4) The costs of transportation improvements required to accommodate the population growth in accordance with the alternative scenario.</i> <i>(5) The economic, social, environmental, regulatory, and institutional barriers to the scenario being achieved.</i> <p><i>(e) If the adopted regional transportation plan already achieves one or more of the objectives set forth in subdivision (c), those objectives need not be discussed or evaluated in the alternative planning scenario.</i></p> <p><i>(f) The alternative planning scenario and accompanying report shall not be adopted as part of the regional transportation plan, but it shall be distributed to cities and counties within the region and to other interested parties, and may be a basis for revisions to the transportation projects that will be included in the regional transportation plan.</i></p> <p><i>(g) Nothing in this section grants transportation planning agencies any direct or indirect authority over local land use decisions.</i></p> <p><i>(h) This section does not apply to a transportation plan adopted on or before September 1, 2001, proposed by a transportation planning agency with a population of less than 1,000,000 persons.</i></p> | |

05 MEASURING UP



The investments identified in the 2012 RTP/SCS are expected to result in significant benefits to the region, not only with respect to transportation and mobility, but also air quality, economic activity and job creation, sustainability and environmental justice. This chapter describes the benefits and outcomes projected to result from the implementation of the RTP/SCS with respect to the adopted performance measures. This chapter also describes how the RTP/SCS addresses the statutory requirements regarding environmental justice, SB 375, and transportation conformity.

Performance Outcomes

This section summarizes how well the 2012 RTP/SCS performs. **TABLE 5.1** lists the performance outcomes and associated measures used to forecast performance using the SCAG Regional Travel Demand Model (RTDM). In addition, this section provides estimates of performance improvements for two different outcomes that do not rely on the RTDM: productivity and reliability. While this chapter includes summaries of the performance improvements expected from the implementation of the RTP/SCS, more detail is provided under separate cover as a technical appendix.

Two new outcomes have been added in the 2012 RTP/SCS: location efficiency and public health. The location efficiency outcome reflects the degree to which land use is improved to provide shorter and easier access to desired destinations, therefore encouraging the transit and active transportation modes. The health outcome monitors pollution emitted from transportation, which causes health problems such as asthma and even premature deaths.

In the discussion of performance and outcomes, three scenarios are referenced: Base Year, Baseline, and Plan. The 2008 Base Year represents existing conditions, and is based on the transportation system on the ground and in service in 2008. The 2035 Baseline assumes current land use trends and represents a future in which only committed programs and projects are implemented, and is based on projects programmed in the 2011 Federal Transportation Improvement Program (FTIP) that have received environmental clearance. The 2035 Plan represents future conditions in which the 2012 RTP/SCS investments and strategies are fully realized. The specific projects associated with Baseline and Plan are identified in the 2012 RTP/SCS Project List report.

TABLE 5.1 Adopted 2012 RTP Outcomes and Performance Measures/Indicators*

| Outcome | Performance Measure/ Indicator | Definition | Performance Target | Data Sources Used |
|----------------------------|--|---|--|--|
| Location Efficiency | Share of growth in High Quality Transit Opportunity Areas (HQTAs) | Share of the region's growth in households and employment in HQTAs | Improvement over No Project Baseline | Census (including annual American Community Survey), InfoUSA |
| | Land consumption | Additional land needed for development that has not previously been developed or otherwise impacted, including agricultural land, forest land, desert land and other virgin sites | Improvement over No Project Baseline | Rapid Fire Model |
| | Median and average distance for work and non-work trips | Median distance is the travel distance from which half of the work or non-work trips exceed and the other half below | Improvement over No Project Baseline | Travel Demand Model |
| | Percent of work trips less than 3 miles | The share of total work trips which are fewer than 3 miles | Improvement over No Project Baseline | Travel Demand Model |
| | Work trip length distribution | The statistical distribution of work trip length in the region | Improvement over No Project Baseline | Travel Demand Model |
| Mobility and Accessibility | Person delay per capita | Delay per capita can be used as a supplemental measure to account for population growth impacts on delay. | Improvement over No Project Baseline | Travel Demand Model |
| | Person delay by facility type (mixed flow, HOV, arterials) | Delay – excess travel time resulting from the difference between a reference speed and actual speed. | Improvement over No Project Baseline | Travel Demand Model |
| | Truck delay by facility type (Highway, Arterials) | Delay – excess travel time resulting from the difference between a reference speed and actual speed. | Improvement over No Project Baseline | Travel Demand Model |
| | Travel time distribution for transit, SOV, HOV for work and non-work trips | Travel time distribution for transit, SOV, HOV for work and non-work trips | Improvement over No Project Baseline | Travel Demand Model |
| Safety and Health | Collision/accident rates by severity by mode | Accident rates per million vehicle miles by mode (all, bicycle/pedestrian and fatality/killed) | Improvement over Base Year | CHP Accident Data Base, Travel Demand Model Mode Split Outputs |
| | Tons of pollutants | Measured/forecast emissions include CO, NOX, PM2.5, PM10, SOX, and VOC. CO2 as secondary measure to reflect greenhouse gas emissions. | Meet SIP Emission Budgets & Transportation Conformity requirements | Emfac 7 Model Output Using Travel Demand Model |

| Outcome | Performance Measure/ Indicator | Definition | Performance Target | Data Sources Used |
|--------------------------|---|---|--|---|
| Environmental Quality | Net tons of pollutants (criteria pollutants) and green house gas emissions | Measured/forecast emissions include CO, NOX, PM2.5, PM10, SOX, and VOC. CO2 as secondary measure to reflect greenhouse gas emissions. | Meet SIP Emission Budgets & Transportation Conformity requirements | Emfac 7 Model Output Using Travel Demand Model |
| Economic Well Being | Additional jobs supported by improving competitiveness | Number of jobs added to the economy as a result of improved transportation conditions which make the region more competitive | Improvement over No Project Baseline | Regional Economic Model REMI |
| | Additional jobs supported by transportation investment | Total number of jobs supported in the economy as a result of transportation expenditures. | Improvement over No Project Baseline | Regional Economic Model REMI |
| | Net contribution to Gross Regional Product | Gross Regional Product due to transportation investments and increased competitiveness | Improvement over No Project Baseline | Regional Economic Model REMI |
| Investment Effectiveness | Benefit/Cost Ratio | Ratio of monetized user and societal benefits to the agency transportation costs | Greater than 1.0 | California Benefit Cost Model |
| System Sustainability | Cost per capita to preserve multi-modal system to current and state of good repair conditions | Annual costs per capita required to preserve the multi-modal system to current conditions | Improvement over Base Year | Estimated using SHOPP Plan and recent California Transportation Commission 10-Year Needs Assessment |

**Performance measures tied to goals for reliability, preservation, productivity, health, energy efficiency, and security cannot currently be reliably forecasted and are not included in Table 5.1. However, SCAG has identified related measures to be used for monitoring purposes, and these are discussed in the Performance Measures technical report.*

Location Efficiency

This is a new outcome for the 2012 RTP/SCS. This outcome has several associated performance measures that reflect the impact of improved land use and transportation coordination in support of the Sustainable Community Strategies (SCS) required under SB 375.

This outcome reflects the degree to which improved land use and transportation coordination measures impact the efficient movement of people and goods. The measures used to describe this outcome include:

- Land consumption (total and per capita),
- Median and average distance for work and non-work trips,
- Percent of work trips less than three miles,
- Share of growth in High Quality Transit Opportunity Areas, and
- Work trip length distribution.

There are several additional measures that will be used for on-going monitoring, and these will be discussed in the technical appendix.

SHARE OF GROWTH IN HIGH QUALITY TRANSIT OPPORTUNITY AREAS (HQTAs)

Between 2008 and 2035, both the shares of growth in both household and employment in the HQTAs are projected to increase from the Baseline scenario to the Plan scenario. Specifically, the share of growth in households in HQTAs increases from 24% under the Baseline to 51% under the Plan. During the same period, the share of growth in employment in HQTAs increases from 31% under the Baseline to 53% under the Plan.

LAND CONSUMPTION

Greenfield land consumption refers to development that occurs on land that has not previously been developed or otherwise impacted, including agricultural land, forest land, desert land and other virgin sites. As discussed above, the Plan directs more growth into the HQTAs than the Baseline. The vast majority of HQTAs is within the existing urbanized

areas. Accordingly, the Plan consumes 408 square miles less “greenfield” land than the Baseline, 334 square miles compared to 742 square miles.

MEDIAN AND AVERAGE DISTANCE FOR WORK AND NON-WORK TRIPS

Discussion of results of median and average distance for work and non-work trips will be included in the Performance Measures technical appendix.

PERCENT OF WORK TRIPS LESS THAN THREE MILES

Discussion of percent of work trips less than three miles will be included in the Performance Measures technical appendix.

WORK TRIP LENGTH DISTRIBUTION

Discussion of results for work trip length distribution will be included in the Performance Measures technical appendix.

Mobility and Accessibility

In the 1998 California Transportation Plan, this outcome is defined as, “Reaching desired destinations with relative ease within a reasonable time, with reasonable choices.” In prior RTPs, mobility and accessibility were included as separate outcomes. For the 2012 RTP/SCS, these have been combined into a single outcome with multiple performance measures. This section discusses the mobility and accessibility performance indicators and provides results based on outputs from the SCAG RTDM.

MOBILITY

The mobility performance measure relies on the commonly used measure of delay. Delay is the difference between the actual travel time and the travel time at some pre-defined reference or “optimal” speed for each mode alternative under analysis. It is measured in vehicle-hours of delay (VHD), which can then be used to derive person hours of delay. This is a relatively straightforward measure to calculate using real-world and modeled data, is understandable by both transportation professionals and the general public, and can be forecast for the 2035 future scenarios.

The mobility measures used to evaluate alternatives for this outcome are:

- Person Movement Delay by Facility Type (Mixed Flow, HOV, Arterials),
- Person Delay per Capita, and
- Truck delay by facility (Highway, Arterial).

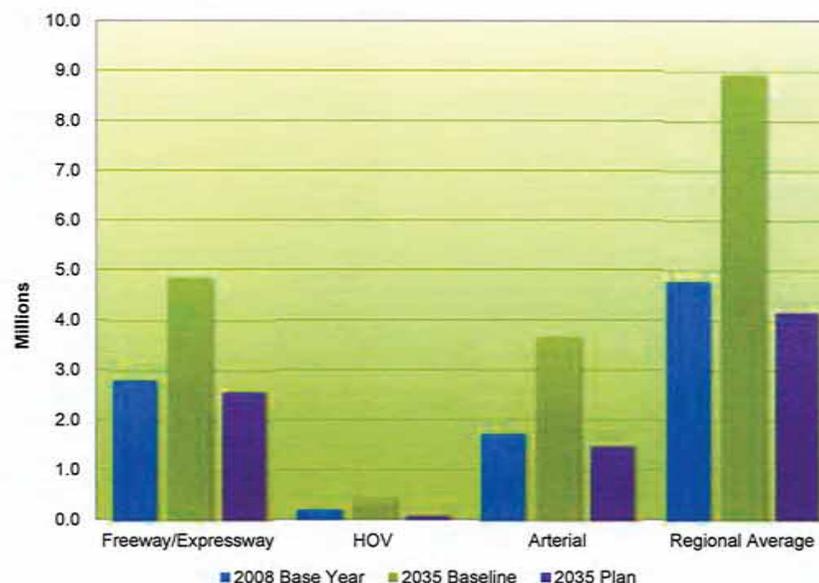
One additional measure for delay that is readily available for on-going monitoring, but that cannot be readily forecast, is non-recurrent delay. Recurrent congestion is the day-to-day congestion that occurs because too many vehicles are on the road at the same time. Non-recurrent congestion is the congestion that is caused by accidents, weather, special events, or other atypical incidents.

Non-recurrent congestion can be mitigated or reduced by improving incident management strategies. Other smart uses of technologies such as traffic signal coordination and the provision of real-time information about unexpected delays allows travelers to make better decisions about available transit or other alternatives.

Person Delay by Facility Type (Mixed Flow Freeways, HOV, Arterials)

For the 2012 RTP/SCS, this measure has been expanded to differentiate between single-occupancy vehicle (SOV) and high occupancy vehicle (HOV) delay. As shown in **FIGURE 5.1**, person-hours of delay is expected to increase from Base Year to Baseline, but overall the Plan will improve on Baseline conditions by 53 percent, to conditions that are better than what is experienced today.

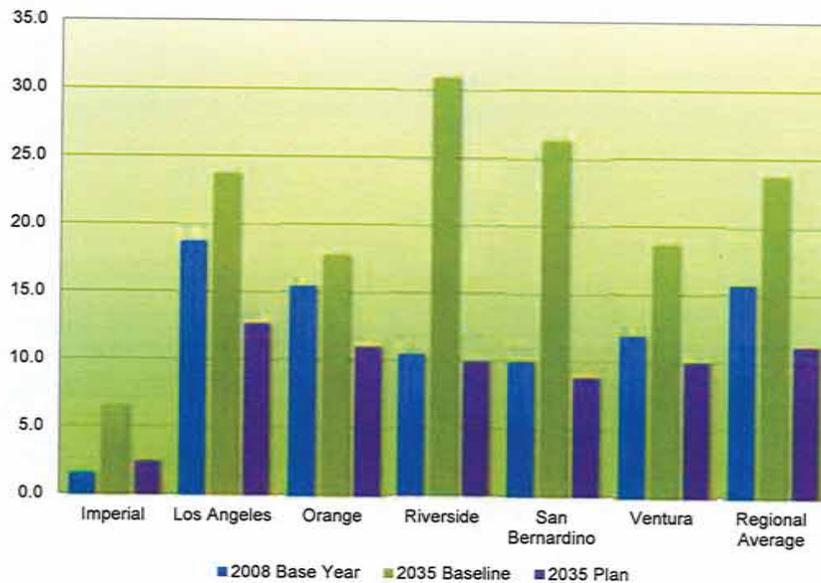
FIGURE 5.1 Person-Hours of Delay by Facility Type



Person Delay per Capita

FIGURE 5.2 shows the person-hours of delay per capita for each of the six counties in the region and for the SCAG region as a whole. Normalizing delay by the number of people living in an area provides insight as to how well the region is mitigating traffic congestion in light of increasing population growth. Delay per capita is expected to grow considerably, particularly in the Inland Empire counties of Riverside and San Bernardino, under the Baseline conditions. However, implementation of the Plan is expected to reduce delay substantially, to below 2008 levels. The regional average delay per capita is expected to improve from over 20 minutes under the Baseline, to over 10 minutes under the Plan. Not only does this represent a 53 percent improvement over Baseline, but a 29 percent improve over Base Year as well.

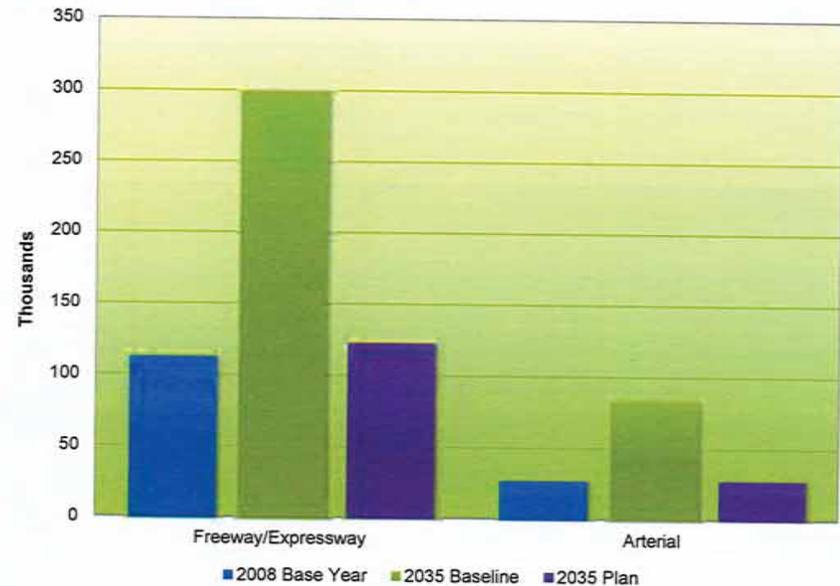
FIGURE 5.2 Person-Hours of Delay per Capita by County



Truck Delay by Facility Type (Highway, Arterials)

This measure estimates the average daily truck delay by facility type for freeways and arterials (FIGURE 5.3). The Plan is estimated to reduce truck delay by 59 percent over Baseline on the freeway system, and by 67 percent on the arterial system.

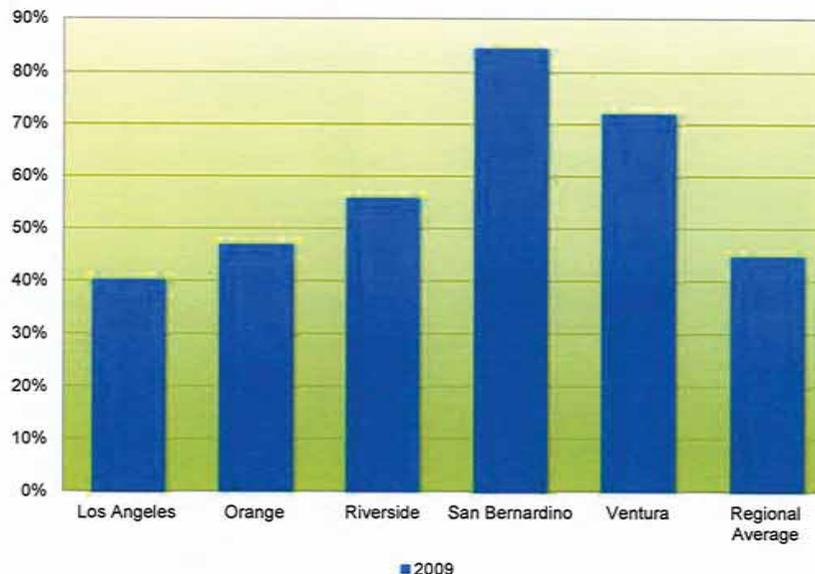
FIGURE 5.3 Heavy Duty Truck Hours of Delay



Highway Non-Recurrent Delay

This indicator identifies how much congestion can be considered to be atypical. Non-recurrent congestion is the congestion caused by accidents, weather, special events or other incidents. This type of congestion can be addressed by strategic operational investments such as traveler information, incident management, and ramp metering. **FIGURE 5.4** shows the relative amount of freeway congestion that is estimated to be caused by non-recurrent events. Regionwide, approximately 45 percent of freeway congestion is estimated to be non-recurrent, but this estimate varies widely by county. More suburban or rural areas with less overall congestion have a higher percentage of all congestion represented by non-recurring events. San Bernardino County, for example, is estimated to have just under 85 percent of its congestion as non-recurrent in 2009. In contrast, the more urbanized Los Angeles County had just over 40 percent of its total congestion represented by non-recurring incidents.

FIGURE 5.4 Non-Recurrent Congestion by County (2009)



ACCESSIBILITY

Accessibility is used to capture how well the transportation system performs in providing people access to opportunities. Opportunities can include anything from jobs, education, medical care, recreation, shopping, or other activities that help improve a person’s quality of life. For the 2012 RTP/SCS analysis, accessibility is defined as the distribution of trips by mode by travel time. This RTP/SCS reports accessibility in a more comprehensive manner than previous RTPs. The Performance Measures technical appendix provides accessibility results by trip purpose, facility type/mode, and time period under separate cover. Accessibility is improved for the 2035 Plan over the Baseline in all cases, in part due to the improvements in land use and investments in transit.

EXHIBIT 5.1 Base Year 2008 Freeway Speed | PM Peak (3pm-7pm)



EXHIBIT 5.3 Plan 2035 Freeway Speed | PM Peak (3pm-7pm)



PRODUCTIVITY AND RELIABILITY

As with the non-recurrent congestion measure described in the previous section, the productivity and reliability outcomes cannot be readily forecast and are not used for alternatives analysis in the 2012 RTP/SCS. They do, however, provide some guidance on how much benefit can be obtained by regional investments in operational improvements. The productivity and reliability estimates presented here are based in part on Corridor System Management Plans (CSMPs) developed recently in the SCAG region. Productivity and reliability are critical since they reflect the improvements in efficiency and non-recurrent congestion, respectively. SCAG plans to monitor the progress achieved in improving productivity and reliability on a regular basis moving forward.

Productivity

The productivity outcome reflects the degree to which the transportation system performs during peak demand conditions. It is a system efficiency measure. The productivity indicator is defined as the percent utilization during peak demand conditions.

For highways, productivity is particularly important because when we need capacity the most, we often get the lowest “production” from our system. On some corridors throughput can decline as much as 50% during peak periods, and most congested urban corridors typically lose 25% of their capacity during rush hour. This loss of productivity is shown in **FIGURE 5.5**, which depicts how much vehicle throughput declines (i.e., productivity is lost) during rush hour. **FIGURE 5.6** shows the percent of transit passenger miles traveled compared to the total number of seat miles provided, a measure of transit productivity.

FIGURE 5.5 Illustrative Highway Productivity Losses

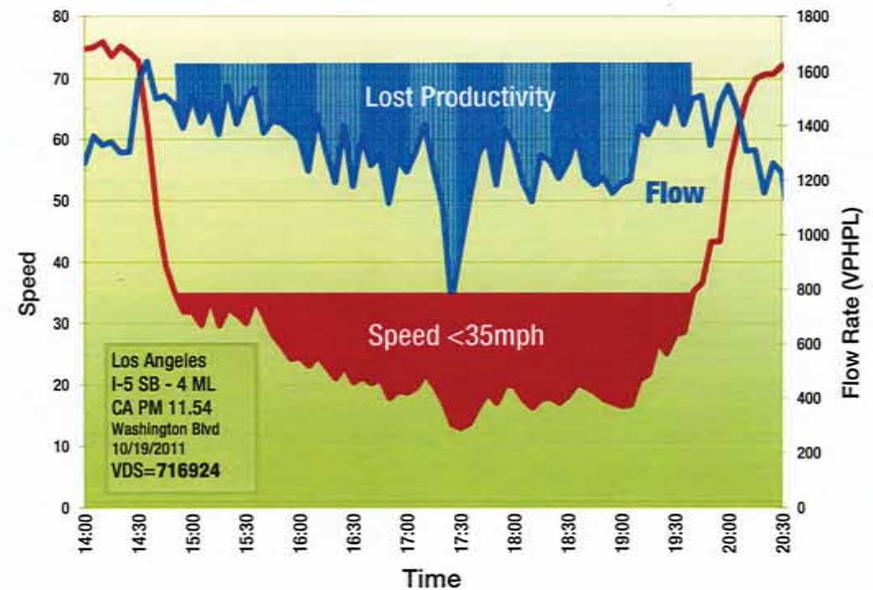


FIGURE 5.6 Transit Productivity (Passenger Miles/Seat Miles)

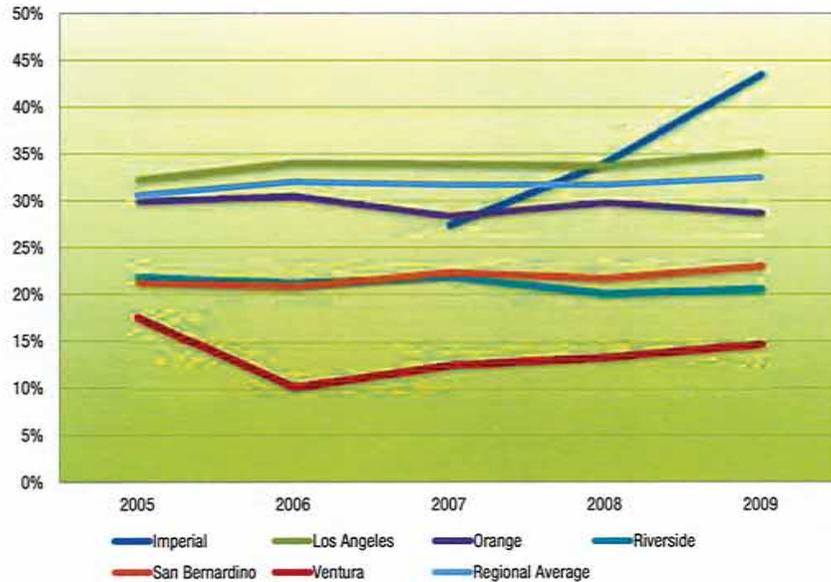


FIGURE 5.7 Highway System Productivity (Lost Lane-Miles)

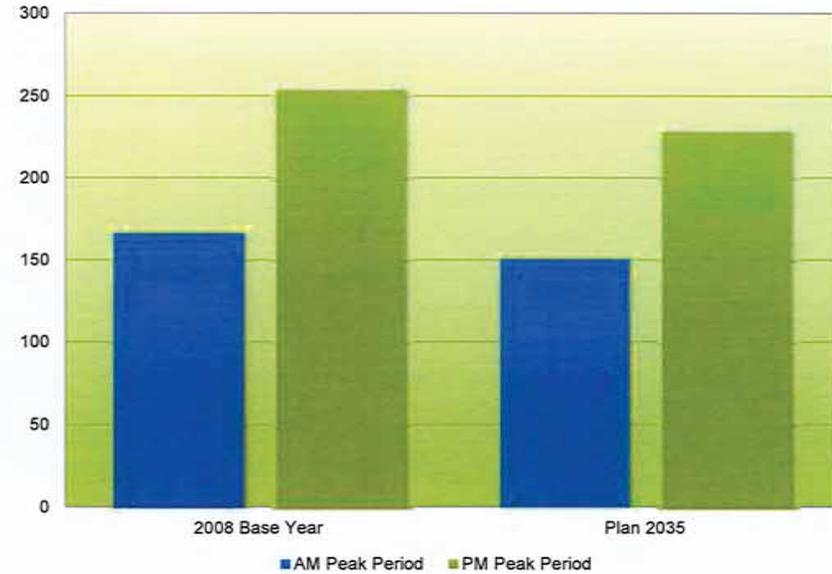
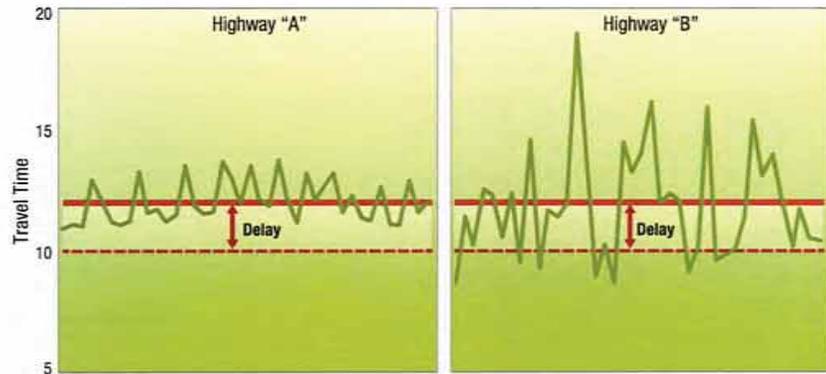


FIGURE 5.7 summarizes the current estimate for productivity losses on the region’s freeway system and the expected improvements due to Plan investments. Maximizing the system’s productivity is a critical goal of this RTP, and the overall system management approach aims to recapture lost productivity. The incremental investment of \$6.2 billion to implement advanced operational strategies on our freeways and arterials is projected to recapture 20 percent of the lost productivity. These projections are based on recent studies indicating that investments in ramp metering, arterial signal coordination, traveler information, and incident management can achieve such improvements and more.

Reliability

Reliability captures the relative predictability of the public’s travel time. Unlike mobility, which measures how fast the transportation system is moving people and goods, and accessibility, which addresses how much time people must spend traveling in total, reliability focuses on how much mobility and accessibility vary from day to day. This variability is illustrated in **FIGURE 5.8**, where Highway “A” and Highway “B” both have the same average travel time, meaning that they experience the same level of mobility. However, when each day’s travel time is taken into account, one sees that Highway “A” has lower variability than Highway “B”.

FIGURE 5.8 Difference Between Reliability and Mobility



Same Mobility (same travel time and delay), but Highway "A" is much more reliable

Reliability is the level of variability in transportation service between the expected travel time and the actual travel time between origin-destination pairs. Reliability can be calculated by using statistical tools. The standard deviation is one such tool that provides an estimate of how much the travel time on any given day will “deviate” from the average travel time. It provides the probable range of time that a motorist will arrive within his or her scheduled time. Dividing the standard deviation by the average time spent traveling produces the percent variability for an OD pair.

Reliability can only be monitored and not forecasted. This is because travel demand models cannot evaluate variations in travel times, but can only estimate average travel times and delay (i.e., mobility). However, **TABLE 5.2** presents the estimated improvements in reliability for three different hours during the day. These improvements are expected as a result of the TSM investments, especially as they relate to incident management. These estimates are based in part on the recently completed Corridor System Management Plans (CSMPs) in the SCAG region.

TABLE 5.2 Estimated Improvements in Reliability

| Hour | Average Travel Time (minutes) | Variability of Travel Time | Travel Time Based on Level of Confidence of Arriving on Time (minutes) | | |
|---------|-------------------------------|----------------------------|--|-----|-----|
| | | | 68% | 95% | 99% |
| 8:00 AM | 23 | 28% | 29 | 36 | 42 |
| Noon | 20 | 15% | 23 | 26 | 29 |
| 5:00 PM | 26 | 34% | 34 | 43 | 51 |

Safety and Health

The safety outcome for evaluating projects has been carried over from the 2008 RTP, but the 2012 RTP/SCS effort also includes a new health outcome. Safety addresses how well the transportation system minimizes accidents and is measured in fatalities, injuries, and property damage accidents per million vehicle miles by mode.

Safety and health impacts of regional transportation improvements cannot be easily forecast, but total accidents can show a reduction in future years if people shift from higher accident modes to lower accident modes. Total number of accidents is generally used as the performance measure, and can be partially projected by using mode specific accident rates (e.g., for highways, arterials, transit). This approach is used for the 2012 RTP/SCS, but it is important to note that this approach does not take into account safety improvements for each mode. It just reflects the changes based on modal or facility shifts. It is not possible to forecast this measure by ethnicity or income group. Finally, for monitoring, this measure can be reported historically by time period month and by mode (including for non-motorized transportation), but it cannot be projected at this level of detail. The safety outcome results are discussed in further detail in the Performance Measures technical appendix.

Health is a new outcome to the 2012 RTP/SCS. There are health measures that will be used for on-going monitoring for the region, but to evaluate alternatives, the health measure will be the tons of pollutants since these are highly correlated to health problems such as asthma. This measure supports both the Health outcome as well as the Environmental Quality outcome.

Environmental Quality

This outcome is measured in terms of criteria pollutant emissions. Emissions are estimated using the SCAG RTDM results, which are input to the ARB's Emission Factors (EMFAC) model. Pollutant emissions are reported in detail as part of the Transportation Conformity technical appendix.

Economic Well-Being

Never before have the crucial linkages and interrelationships between the economy, the regional transportation system, and land use been as important as now. For the first time, the 2012 RTP/SCS includes a significant consideration of the economic impacts and opportunities provided by the transportation infrastructure plan set forth in the RTP/SCS, considering not only the economic and job creation impacts of the direct investment in transportation infrastructure, but also the efficiency gains in terms of worker and business economic productivity and goods movement. The RTP/SCS outlines a transportation infrastructure investment strategy that will beneficially impact Southern California, the state, and the nation in terms of economic development, competitive advantage, and overall competitiveness in the global economy in terms of attracting and retaining employers in the Southern California region.

Implementation of SCAG's RTP/SCS will create or sustain jobs today to build transportation infrastructure projects for tomorrow. SCAG's RTP/SCS totaling more than \$500 billion in transportation investments will put thousands of Southern Californians back to work in much needed jobs, not only in construction, but in a broad cross-section of industry clusters. Over the twenty-five year period, the plan will generate 4.2 million total jobs in the six-county region, or an annual average of 167,900 (TABLE 5.3). In addition, the rest of the state of California will benefit from spillover impacts of an additional 237,700 annual jobs, and an additional 306,500 annual jobs will accrue to other states.

TABLE 5.3 Total Employment Impact

| | FY 2011- 2015 | FY 2016- 2020 | FY 2021- 2025 | FY 2026- 2030 | FY 2031- 2035 | TOTAL |
|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----------|
| Total Jobs | 902,700 | 829,700 | 787,900 | 919,800 | 756,700 | 4,196,800 |
| Annual Average | 180,500 | 165,900 | 157,600 | 184,000 | 151,300 | 167,900 |

The Goods Movement, Logistics & Distribution, Tourism, Manufacturing, and many other transportation reliant sectors are heavily dependent on efficient transportation infrastructure and are key Southern California job generators for all six SCAG-region counties. Reductions in congestion also have a positive impact on regional employment and gross regional product (or output.) A ten percent reduction in travel time in the region produces an estimated 132,000 new total jobs from 2012 through 2035, based on recent REMI modeling. Without making the investments in Southern California's transportation system outlined in this plan, economic recovery and job creation will be markedly slower throughout the region. Longer term, failure to make sufficient regional transportation investments will cost Southern California economically and the region's business competitiveness will be at risk.

Investment Effectiveness

The cost-effectiveness outcome indicates the degree to which the Plan's expenditures generate benefits that transportation users can experience directly. This outcome is important to the public because it describes how the Plan's transportation investments make productive use of scarce funds.

The benefit-cost ratio is the indicator for the cost-effectiveness outcome, and it compares the incremental benefits to the incremental costs of the modal investments. The benefits are divided into several categories, including:

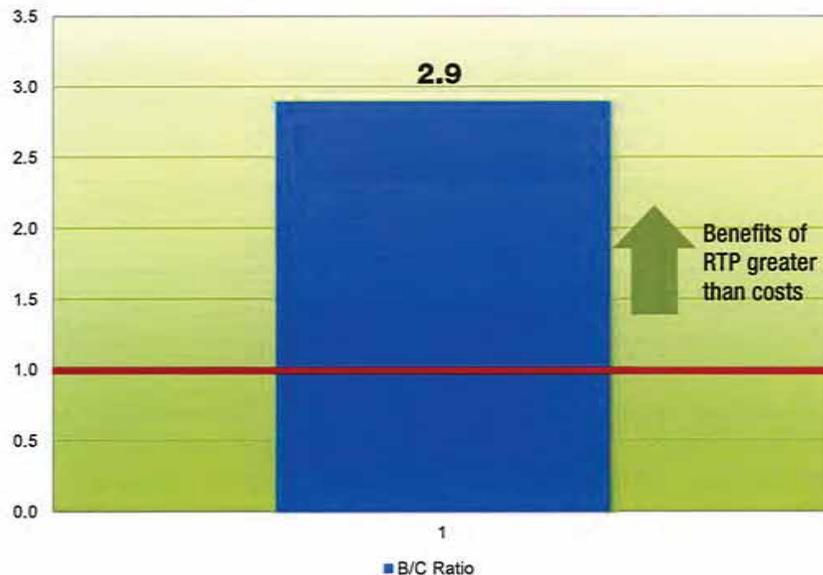
- Delay savings,
- Safety improvements,
- Air quality improvements, and

- Reductions in vehicle operating costs.

For these categories, travel demand and air quality models are used to estimate the benefits of the Plan compared to the Baseline. Most of these benefits are a function of changes in Vehicle-Miles Traveled (VMT) and Vehicle-Hours Traveled (VHT). For example, a highway project that increases VMT would hurt safety, air quality, and vehicle operating costs, while a transit project that decreases VMT would have the opposite effect. Not all impacts are linear, so reductions in congestion can increase or decrease vehicle operating costs and emissions. Delay savings are reflected directly in the VHT statistics.

To estimate the benefit-cost ratio, the benefits in each category are converted into dollars and added together. These are divided by the total incremental costs of the Plan's transportation improvements to produce a ratio. FIGURE 5.9 summarizes the results of this analysis.

FIGURE 5.9 Results of Regional Benefit/Cost Analysis



The investments in the 2012 RTP provide a return of \$2.90 for every dollar invested. For this analysis, all benefits and costs are expressed in 2011 dollars. Benefits are estimated over the 25-year RTP planning period from 2011 to 2035. The user benefits are estimated using California's Cal-B/C benefit-cost framework and incorporate SCAG's RTDM outputs. The costs include the incremental public expenditures over the entire RTP planning period.

System Sustainability

A transportation system is sustainable if it maintains its overall performance over time with the same costs for its users. Sustainability, therefore, reflects how our decisions today affect future generations. The indicator for sustainability is the total inflation-adjusted cost per capita to maintain overall system performance at current conditions.

The performance measures presented in this chapter show that the planned transportation system in 2035 will perform better compared to today. This RTP/SCS commits itself to maintaining a sustainable system by allocating \$217 billion to maintaining the system in a state of good repair over the period of the plan. This is an average annual per capita investment of more than \$400 per person for each year of the plan period.

RTP/SCS Performance for Co-Benefits

In addition to the transportation performance results discussed above, the RTP/SCS's more focused land pattern, increased investments in transit, and support for communities that foster walk and bike modes as serious transportation options, leads to additional benefits in fiscal, economic, environmental, and other quality of life performance. These results compare the RTP/SCS with a future trend-based scenario that more closely follows the development trends of the past decades. Unlike the RTP/SCS, this trend-based future scenario relies more heavily on growth in undeveloped lands at the edges of cities and beyond and focuses more new housing towards single-family products in suburban patterns. Different from the modeling process used for the mobility-based performance measures, these performance results were derived using the single framework model described in Appendix 19.

Better Placemaking

The challenges of traffic congestion and long commutes make the value of creating better places to live and work even more important. The RTP/SCS focuses over 50 percent of new housing and job growth for 2035 in areas served by high quality transit, as well as other opportunity areas in existing main streets, downtowns, and along corridors where infrastructure already exists. This more compact land use pattern, combined with the identified transportation network improvements and strategies, results in improved pedestrian and bicycle access to community amenities, lowers average trip length, and reduces vehicle miles traveled. These outcomes not only reduce GHG emissions, but also support the development of more livable communities that provide more housing choices, conserve natural resources, offer transportation options, and promote a better quality of life.

Lower Cost to Taxpayers and Families

LOCAL INFRASTRUCTURE CAPITAL AND OPERATIONS AND MAINTENANCE COSTS

Increased land consumption can lead to higher costs for local and sub-regional infrastructure, as new development in “greenfield” lands (areas, including agricultural lands, not previously developed for urban uses) requires significant capital investments to extend or build new local roads, water and sewer systems, and parks. Conversely, growth focused in urban areas takes advantage of existing infrastructure and more efficient service to higher concentrations of jobs and housing. This cost difference increases when operations and maintenance (O&M) costs are taken into account. O&M costs include the ongoing city expenditures required to operate and maintain the infrastructure serving new residential growth. More dispersed development, which requires greater lengths of roads and sewer pipes, incur higher O&M costs to local jurisdictions than more compact development, which capitalizes on shared infrastructure capacity.

The RTP/SCS shows that growth in urban and mixed-use developments in already developed areas can reduce costs significantly, as demonstrated by adding up capital infrastructure and ongoing O&M costs to 2035. If the development trend of the past decades continue, new growth would require \$33.2 billion in capital infrastructure and O&M costs.

By contrast, following the land use pattern of the RTP/SCS leads to \$27.2 billion in costs, representing a savings of \$6 billion.

LOCAL REVENUES

To determine the RTP/SCS’s impact on local revenues, SCAG utilized estimates of potential revenues from property and property transfer taxes, sales taxes, and vehicle license fees generated by new housing units. By 2035, the RTP/SCS’s more compact development generates \$13,800 per acre in local revenues, which is approximately \$4,000 per acre more than a land use pattern of more dispersed development.

HOUSEHOLD COSTS

If the land use patterns of the past decades persist, average household cost associated with driving and residential energy and water use will be up to \$19,000 in 2035. By comparison, the RTP/SCS would cost each household \$16,000. Over time, the differences in annual expenditures would amount to a significant sum for each household, which increases further if the effect of local infrastructure cost burdens, which are typically passed on to homeowners and renters in the form of taxes, fees, home prices, and assessments, is considered.

Benefits to Public Health and the Environment

LAND CONSUMPTION

New land consumption includes all land that will be newly urbanized, including residential and employment areas, roadways, open space, and public lands. Through infill, redevelopment, and more efficient use of new greenfield land to accommodate new growth, a land use pattern with a greater share of urban infill and compact development consumes less land overall. By contrast, a pattern that places a greater share of new growth in dispersed standard development patterns consumes more land. The development trend of the past decades would consume approximately 740 square miles of greenfield land, nearly twice as much as the RTP/SCS which consumes approximately 330 square miles, to accommodate growth in 2035.

BUILDING ENERGY USE

Building energy use is determined by the mix of housing types and the proportion of development in temperate climate zones within the SCAG region. A land use pattern that contains more mixed-use/walkable and urban infill development accommodates a higher proportion of growth in more energy-efficient housing types like townhomes, apartments, and smaller single family homes, as well as more compact commercial building types. By contrast, a large proportion of standard development leads to a higher proportion of larger single-family homes, which are typically less energy-efficient. Location also comes into play—buildings in the warmer areas at the edges of the region and beyond use more energy each year, in part because they require more energy to cool during the summer months.

Differences in land use patterns lead to substantial differences in the amount of electricity and natural gas used. These differences will vary depending on policies regulating how efficient buildings become. Assuming the same efficiency standards, the RTP/SCS uses 8 percent less energy per year when compared to a land use pattern that more closely aligns with the past development trend. Additionally, the overall energy savings that come from developing more compactly translate to meaningful savings in residential energy bills. On average, the RTP/SCS saves approximately \$950 million per year in total by 2035, or about \$130 per household.

RESIDENTIAL WATER USE

Variations in land use patterns and their related building profiles also lead to substantial differences in residential water use and cost. Residential water use is a function of both indoor and outdoor water needs, with outdoor use (landscape irrigation) accounting for the majority of the difference among housing types. Because homes with larger yards require more water for landscape irrigation, lot size is generally interrelated with a household's overall water consumption. Thus, a land use pattern with a greater proportion of the standard development, which includes more large-lot single-family homes, require more water than a land use pattern with a greater proportion of compact and urban infill development, which include more attached and multifamily homes. And, as is the case for energy use, the location of new development has a significant bearing on water use—homes in warmer areas use more water to maintain lawns and other landscaping.

Water use will vary based on efficiency and conservation policies, which will be increasingly important as California faces future constraints to water supply. Assuming the same modest improvements, the RTP/SCS uses approximately 970 billion gallons of water (6 percent less than a land use pattern based on past development trends). Saving water also saves on costs, and the RTP/SCS saves approximately \$245 million per year in total by 2035.

HEALTH INCIDENCES AND COSTS

Auto-related air pollution results in a spectrum of health incidences, including cases of chronic bronchitis; respiratory and cardiovascular hospitalizations; respiratory-related ER visits; acute bronchitis; work loss days; premature mortality; asthma exacerbation; and acute, lower, and upper respiratory symptoms. Using research-based rates and valuations produced by the American Lung Association, the RTP/SCS results in a 24 percent reduction in total health incidences, and saves over \$1.5 billion per year in total costs.

GREATER RESPONSIVENESS TO DEMOGRAPHICS AND THE CHANGING HOUSING MARKET

There is little question that the demographic profile of Southern California is changing, resulting in different housing and transportation needs. The traditional suburban development pattern that characterizes most of the region is still appropriate for many residents and homeowners, but the increasing demand for small-lot and multi-family housing, walkable and bikeable environments, and shorter commutes calls for more varied housing options located in more compact development.

The RTP/SCS responds to this emerging need through an overall land use pattern that focuses new housing growth in urban centers served by various transportation options, including high-quality transit and active transportation. Approximately 70 percent of this new housing will be multi-family products.

Environmental Justice

Title VI and Environmental Justice Overview

The concept of environmental justice is about equal and fair access to a healthy environment, with the goal of protecting underrepresented and poorer communities from incurring disproportionate environmental impacts. Consideration of environmental justice in the transportation planning process stems from Title VI of the Civil Rights Act of 1964. Title VI of the Civil Rights Act of 1964 establishes the need for transportation agencies to disclose to the public the benefits and burdens of proposed projects on minority populations. The understanding of civil rights has expanded to include low-income communities, as further described below. Title VI states that “No person in the United States shall, on the ground of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” Additionally, Title VI not only bars intentional discrimination, but also unjustified disparate impact discrimination. Disparate impacts result from policies and practices that are neutral on their face (i.e., there is no evidence of intentional discrimination), but have the effect of discrimination on protected groups.

A 1994 Presidential Order (Executive Order 12898) directed every Federal Agency to make environmental justice part of its mission by identifying and addressing the effects of all programs, policies and activities on underrepresented groups and low-income populations. Reinforcing Title VI of the Civil Rights Act of 1964, this Presidential Order ensures that every federally funded project nationwide consider the human environment when undertaking the planning and decision-making process.

In addition to Federal requirements, SCAG must comply with California Government Code Section 11135, which states that, “no person in the State of California shall, on the basis of race, national origin, ethnic group identification, religion, age, sex, sexual orientation, color, or disability, be unlawfully denied full and equal access to the benefits of, or be unlawfully subjected to discrimination under, any program or activity that is conducted, operated, or administered by the state or by any state agency, is funded directly by the state, or receives any financial assistance from the state.”

The State of California also provides guidance for those involved in transportation decision-making to address environmental justice. In 2003, Caltrans published the Desk

Guide on Environmental Justice in Transportation Planning and Investments to provide information and examples of ways to promote environmental justice. The Desk Guide identified requirements for public agencies, guidance on impact analyses, recommendations for public involvement, and mitigation.

Under SB 375, SCAG is required to include a Sustainable Communities Strategy within the 2012 RTP/SCS. The RTP/SCS represents the collective vision of the six counties in the SCAG region and provides a framework for the future development of our regional transportation system. Through SB 375, the State establishes a target for GHG reduction for cars and light trucks from the SCS. The targets for the SCAG region are 8 percent in 2020 and 13 percent in 2035, from 2005 levels. As part of the early target setting process, the ARB appointed a Regional Target Advisory Committee (RTAC) to recommend factors to be considered and methodologies to be used for setting the targets. The RTAC report was finalized in September 2009 and included a recommendation on Housing and Social Equity. The report recognized the impact that policies to reduce VMT have on social equity, specifically that the provision of appropriately located affordable housing matches local wage levels. The RTAC further recommended that displacement and gentrification, as a result of changing land uses and increased housing costs, should be addressed and specifically avoided to the extent possible in the SCS. As a result of this recommendation and input from our environmental justice stakeholders, SCAG has updated its methodology to include new areas of analysis, including gentrification and displacement.

Major Environmental Justice Issues in the Region

The SCAG region is experiencing major challenges to its quality of life and affordability. For example, the region’s residents have a high cost burden with 45 percent of owner-occupied households and 54 percent of renter-occupied households spending 30 percent or more of their incomes on housing. In the SCAG region, less than 55 percent of households own their homes, a 2 percentage point decline from 2007 and 11 percent below the national average for homeownership (66 percent). There were 8.1 million renters in the region in 2009.

In general, housing is considered affordable if it costs 30 percent or less of a household’s income. However, a more refined indicator called the Housing + Transportation Affordability Index was developed by the Center for Neighborhood Technology to better gauge the true cost of housing based on its location. Based on this index, 67 percent of

households in the SCAG region spend 45 percent or more of their incomes on housing and transportation, among the highest percentages in the nation.

The poverty rate in the SCAG region stands at 15 percent with 2.6 million residents living in poverty. This is 3 percentage points higher than the national average. In 2009, per capita income was \$42,784, which is about \$17,000 less than the San Francisco Bay Area. Adding to the high poverty rate, real average wages (adjusted for inflation) have been stagnant for a decade. Further, for the past three years the SCAG region has experienced unemployment rates over 12 percent, about 3 percentage points higher than the national average. The lower income levels may be associated with the educational attainment levels in the region. Only 25 percent of adults have a bachelor's degree or higher in the SCAG region, compared to almost 40 percent in the San Francisco Bay Area. In Riverside and San Bernardino counties, 17 percent of adults have a bachelor's degree or higher. In Imperial County, only 12 percent of adults had a bachelor's degree or higher.

Additional environmental concerns include exposure to toxic pollutants and obesity levels. Exposure to air pollutants is an environmental justice issue due to the disproportionate share of minority and low-income populations living in close proximity to heavily traveled corridors, particularly near port and logistics activity. This exposure to unhealthy air results in 5,000 premature deaths and 140,000 children with asthma and respiratory symptoms. More than half of Americans exposed to PM 2.5 pollution exceeding the national standard reside in the SCAG region. Additionally, populations living in areas without access to parks, safe walking environments and fresh food have a greater prevalence of obesity and associated ailments such as diabetes. Although the SCAG region's level of obesity (24 percent) is lower than the national average of 33.8 percent, there are still disparities among racial groups, based on data from the CDC. For example, the prevalence of obesity among Non-Hispanic white women is 33 percent, whereas the obesity rates among Non-Hispanic black women and Mexican American women is 49.6 percent and 45.1 percent, respectively. This raises policy questions about the opportunities for physical activity, access to healthy foods, and safety.

SCAG's Environmental Justice Policy & Program

As a government agency that receives federal funding, SCAG is required to conduct an environmental justice analysis for its RTP. SCAG's environmental justice program includes two main elements: technical analysis and public outreach. Specifically, it is SCAG's role to ensure that when transportation decisions are made, low-income and minority communities have ample opportunity to participate in the decision-making process and that they receive an equitable distribution of benefits and not a disproportionate share of burdens.

SCAG adheres to all directives on environmental justice. The environmental justice movement stems from Title VI of the Civil Rights Act of 1964. Title VI of the Civil Rights Act of 1964 provides one very significant means by which the public can seek greater accountability from transportation agencies. Title VI states that "No person in the United States shall, on the ground of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

Under federal policy, all federal agencies must make environmental justice part of their mission and adhere to three fundamental environmental justice principles:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

In the 1990's, the federal executive branch issued orders on environmental justice that amplified Title VI, in part by providing protections on the basis of income as well as race. These included President Clinton's Executive Order 12898 (1994) and subsequent U.S. Department of Transportation (DOT) and Federal Highway Administration orders (1997 and 1998, respectively), along with a 1999 DOT guidance memorandum.

On August 4, 2011 federal agencies signed the "Memorandum of Understanding on Environmental Justice and Executive Order 12898." The signatories, including 17 federal agencies, agreed to develop environmental justice strategies to protect the health of

people living in communities overburdened by pollution and provide the public with annual progress reports on their efforts. The MOU advances agency responsibilities outlined in the 1994 Executive Order 12898 and directs each of the Federal agencies to make environmental justice part of its mission and to work with other agencies on environmental justice issues as members of the Interagency Working Group on Environmental Justice.

In response to this MOU, the U.S. Department of Transportation revised its Environmental Justice Strategy. The revisions reinforce the DOT's programs and policies related to environmental justice and strengthen its efforts to outreach to minority and low-income populations. Further, on September 29, 2011, the Federal Transit Authority issued two proposed circulars on Title VI and Environmental Justice to clarify the requirements and offer guidance. FTA Circular 4702.1A, Title VI Requirements and Guidelines for Federal Transit Administration Recipients (Docket No. FTA-2011-0054) provides information required in the Title VI Program, proposes changing the reporting requirement from every four years to every three years, and adds a requirement for mapping and charts to analyze the impacts of the distribution of State and Federal public transportation funds. SCAG has reviewed the proposed circular and believes preliminarily that the efforts in this RTP/SCS will be in compliance. The FTA Circular 4703.1, Environmental Justice Policy Guidance for Federal Transit Administration Recipients (Docket number FTA-2011-0055) provides recommendations to MPOs (and other recipients of FTA funds) on how to fully engage environmental justice populations in the public transportation decision-making process; how to determine whether environmental justice populations would be subjected to disproportionately high and adverse human health or environmental effects as a result of a transportation plan, project, or activity; and how to avoid, minimize, or mitigate these effects. The proposed Circular does not contain any new requirements, policies or directives. Nonetheless, SCAG intends to comply with the framework provided to integrate the principles of environmental justice into our decision-making processes.

SCAG's Title VI and Environmental Justice Outreach

A key component of the RTP/SCS development process is seeking public participation. Public input from our environmental justice stakeholders helped SCAG prioritize and address needs in the region. As part of the environmental justice outreach effort, SCAG compiled a list of key stakeholders to be contacted regarding RTP/SCS programs and policies. This list is comprised of over 250 persons and organizations involved with the 2008 RTP as well as additional stakeholders, such as the South Coast Air Quality Management District's (SCAQMD) Environmental Justice Working Group, which included new groups such as local community advocates, air quality non-profit organizations, and unions. SCAG maintains this list regularly and allows interested persons to sign-up for the mailing list online.

SCAG held two environmental justice workshops and convened focus groups on the environmental justice analysis to ensure that all members of the public have an opportunity to participate meaningfully in the planning process. On June 24, 2010, SCAG held a workshop to review the planning process and familiarize the participants with the environmental justice analysis process. The workshop drew 37 participants throughout the region, with webcasting made available from SCAG's regional offices.

The following is a summary of the main topics discussed at the workshop:

- SCAG was requested to conduct a presentation on SCAG's modeling process,
- The environmental justice analysis should include baseline data of major issues facing the region,
- Public health was identified as a topic that should be further analyzed,
- SCAG was requested to include the housing plus transportation affordability index in its analysis, and
- Gentrification needs to be addressed, particularly with SB 375's emphasis on transit oriented development.

As a result of these workshops, SCAG determined that new analysis areas were necessary to capture the concerns raised from our stakeholders. These new areas are discussed in greater depth below but include impacts from rail transportation, gentrification and displacement, pollution exposure along heavily traveled corridors, and impacts from revenue generating mechanisms such as congestion pricing.

On June 30, 2011, SCAG held a follow-up workshop to discuss the proposed new analysis areas with our stakeholders and seek further input. In response to comments from the first workshop, SCAG also included a summary of the modeling process. This workshop drew 45 participants from all six regional offices.

The participants provided thoughtful comments and feedback on SCAG's proposed analysis and planning process including:

- PM 2.5 should be analyzed in the EJ report,
- The Environmental Justice community should be included early in the decision-making processes and advisory committees,
- The report should identify communities of concern and compare those areas with the location of investments,
- SCAG should produce maps that show long range trip projections compared to system capacity,
- Housing should be included in the performance measures, including housing/jobs fit (costs vs. wages), and
- The impacts of freight movement should be analyzed and mitigated.

In response to comments made at the workshop, SCAG followed up by organizing focused meetings to further discuss the methodology and ensure it addresses the concerns raised by our environmental justice stakeholders. Also, participants were urged to attend subsequent public workshops. Many of those who attended the Environmental Justice workshops did attend the RTP/SCS workshops. Furthermore, to address the comments made during SCAG's workshops, the environmental justice analysis will be updated in the following key ways:

- Focus more on non-motorized transportation,
- Identify and quantify the primary environmental justice challenges in transportation in the region including the development of a baseline for key issues such as poverty, exposure to pollutants, and concentration of pollutants,
- Bring public health to the forefront—focus on pollutants and cancer concentration in communities of concern,
- Begin to analyze potential gentrification impacts from urban infill and transit oriented development, and

- Provide an environmental justice mitigation toolbox with recommended mitigation measures for subsequent projects.

Technical Analysis

SCAG has established itself as a leader in environmental justice analyses and has been recognized for its technical approach to understand the benefits and burdens our regional plan. Each planning cycle presents new and emerging concerns for the region to address. For example, in the 2008 RTP, SCAG analyzed accessibility to public parks including the distribution of parks by income and park accessibility by travel mode and income. In keeping with the trend of developing robust environmental analyses, the current RTP/SCS analyzes impacts from rail transport, exposure to pollutants along heavily traveled corridors, gentrification and displacement, and impacts from revenue generating mechanisms such as congestion pricing. As with previous RTPs, the goal of the 2012 RTP/SCS is to ensure that when transportation decisions are made, low-income and minority communities have ample opportunity to participate in the decision-making process and receive an equitable distribution of benefits and not a disproportionate share of burdens.

IDENTIFYING DEMOGRAPHIC GROUPS

Executive Order 12898 and the DOT and FHWA Orders on Environmental Justice define “minority” as persons belonging to any of the following groups, as well as “other” categories that are based on self-identification of individuals in the U.S. Census: Black, Hispanic, Asian, and American Indian and Alaskan Native. SCAG bases its analysis on the latest census data for ethnic/racial groups in the SCAG region by census tract and by transportation analysis zone (TAZ).

Identifying low-income and minority populations is necessary both for conducting effective public participation and for assessing the distribution of benefits and burdens of transportation plans and projects. For the purposes of this analysis, SCAG focused on all low-income groups and minority populations. The minority population in the SCAG region comprises over 70 percent of the population (verify). The predominant minority groups are Hispanics and Asian/Pacific Islanders, which combine to account for 66 percent of the total minority population within the SCAG region (verify). Poverty level is a federally established income guideline used to define persons who are economically disadvantaged as defined by the U.S. Department of Health & Human Services guidelines.

The poverty level applicable to the SCAG region is chosen on the basis of regional average household size for the census year. For example, for a regional mean of 2.98 persons—rounded to 3—per household, the threshold would consist of the sum of the value for the first person plus two additional people. The household counts in each income range are then used to determine the number and percentage of households in each census tract below the poverty level. In 2010, a family of three earning less than \$17,374 was classified as living in poverty.

In addition to complying with federal guidance, SCAG also conducts income equity analyses based on five income quintiles. A quintile, by definition, is a category into which 20 percent of the ranked population falls. For each new analysis, SCAG defines regional income quintiles based on the most recent census data on household income. Once the income quintiles are established, the incidence of benefits and costs can be estimated and compared across these income categories. **TABLE 5.4** lists the demographic categories used in SCAG’s environmental justice analysis.

TABLE 5.4 Demographic Categories

| Ethnic/Racial/Other Categories (Persons) | Income Categories (Households) |
|---|-----------------------------------|
| White (Non-Hispanic) | Below Poverty Level |
| African-American | 100%–150% of Poverty Level |
| American Indian | 150%–200% of Poverty Level |
| Asian/Pacific Islander | Income Quintile 1 (lowest) |
| Hispanic (Latino) | Income Quintile 2 |
| Other | Income Quintile 3 |
| Disabled/Mobility Limited | Income Quintile 4 |
| Age 65 and Above | Income Quintile 5 |

PLAN VERSUS BASELINE

As with the other performance outcomes presented in this chapter, the comparison of the Plan versus Baseline is the primary focus of the environmental justice analysis for the 2012 RTP. The Plan represents the selected strategy to guide the region’s transportation planning over the next few decades, while the Baseline represents “business as usual” and assumes current land use trends and the completion of projects programmed in the 2011 Federal Transportation Improvement Program (FTIP) that have received environmental clearance. The data for the analysis is based on the SCAG RTDM results.

PERFORMANCE MEASURES

In development of the Plan, SCAG utilized a number of performance measures designed to discuss the overall social and environmental equity.

- Accessibility (employment services and parks)
- Distribution of plan expenditures (investments)
- Taxes paid
- Auto travel time savings
- Auto travel distance reductions
- Environmental impact analyses (air and noise)
- Gentrification and displacement
- Air quality impacts along freeways and highly traveled corridors
- Rail-related impacts
- Impacts of pricing strategies

The following section summarizes the methodologies to be employed for the 2012 RTP/SCS Environmental Justice analysis. The final results are presented in the Environmental Justice technical appendix.

Accessibility to Employment Services

Accessibility is a foundation for social and economic interactions. As an indicator, accessibility is measured by the spatial distribution of potential destinations; the ease of reaching each destination; and the magnitude, quality and character of the activities at the

destination sites. Travel costs are central: The lower the costs of travel, in terms of time and money, the more places that can be reached within a certain budget and, thus, the greater the accessibility. Destination choice is equally crucial: The more destinations and the more varied the destinations, the higher the level of accessibility.

Employment accessibility evaluates how well the transportation system is providing access to jobs for underrepresented populations. In this analysis, employment accessibility is defined as the percentage of total employment opportunities that can be reached within 30 minutes during the PM peak periods.

Accessibility to Parks

Numerous national parks, state parks, and local parks are all found within the SCAG region. However, not all neighborhoods and people have equal access to these public resources. For the purposes of this analysis, three types of parks were considered: 1) local parks; 2) state parks; and 3) national parks. The acreage of each park type in all TAZs was identified. Similar to the method in measuring job accessibility, park accessibility is defined as the percentage of park acreage reachable within a 30-minute off-peak travel time period via 1) automobile; 2) local bus/urban rail via automobile; and 3) local bus/urban rail via walking. Without a weekend regional transportation model system, the existing typical weekday model was utilized for the analysis. Because visits to parks are, by nature, leisure trips, off-peak travel time is used instead of peak travel time. For transit travel time, both the waiting time and the on-board time are included.

Plan Expenditures

SCAG reports expenditure distribution in several ways. First, SCAG estimates the share of total RTP expenditures allocated to each category of household income. This is done by totaling expenditures on each type of mode (bus, HOV lanes, commuter/high-speed rail, highways/arterials, and light/heavy rail). These expenditures are then allocated to income categories based on each income group's tendency to use these modes. SCAG analyzed the distribution of Plan expenditures based on mode usage information by income quintile.

Distribution of Travel Time Savings

This analysis involved measuring the average travel time for both work trips and non-work trips. SCAG assesses the distribution of travel time savings that are expected to result from the Plan's implementation. SCAG conducted this analysis for transit (i.e. bus and light rail) and automobile. These travel time savings were reported as a proportion of the total travel time savings for each mode.

Travel Distance Reductions

Another way of estimating benefits is to calculate savings in terms of person miles traveled (PMT). These results indicate that the share of auto travel distance savings, like that for time savings, generally resembles the share of usage and taxes paid.

Air Pollution Emissions

Minorities and low-income groups may be particularly vulnerable to the effects of air pollution. SCAG's analysis is based on emissions estimates for pollutants that have localized health effects: carbon monoxide (CO) and particulate matter (PM). Analysis was also conducted for PM exhaust emissions from heavy-duty vehicles, an indicator for diesel toxic air contaminants. The results were computed based on the average emissions at the TAZ level and weighted according to the population of each ethnic or income group in that TAZ. This analysis focuses on air emissions and noise impacts generated from aviation and highway activity.

Since ambient pollutant concentration levels that are directly linked to localized emissions could not be easily estimated, the geographic emissions distribution analysis presented here focuses on pollutants that tend to have localized effects which are generally proportionate to emissions—carbon monoxide (CO) and fine particulate matter (PM₁₀ and PM_{2.5}). The analysis does not cover pollutants that do not have localized effects proportionate to emissions, but are regionally distributed as a result of chemical interactions, photochemical reactions and meteorology (VOC, NO_x, and SO_x).

In addition, this methodology assumes that all residents in a given TAZ are equally exposed. Generally, both CO and PM_{10/2.5} tend to impact those located closest to the source of emissions. Thus, in a TAZ containing a roadway, those closest to the roadway would experience greater emissions and potential health impacts than those located

further away. This differential as it might exist within TAZs is not addressed by this analysis; only differences between the aggregate demographic totals of different TAZs are addressed. Notwithstanding these assumptions, the methodology presents a reasonable gross measure of air quality impacts of mobile sources in the region.

Aviation Noise Impacts

The SCAG region supports the nation's largest regional airport system in terms of number of airports and aircraft operations, operating in a very complex airspace environment. One significant challenge is striking a balance between aviation capacity needs of Southern California with local quality of life constraints for the affected populations. Projected noise impacts from aircraft operations at the region's airports in 2035 were modeled for inclusion in the PEIR for the RTP. For each airport, modeling produced a contour or isoline for the 65 dB Community Noise Equivalent Level (CNEL), a measure of noise that takes into account both the number and the timing of flights, as well as the mix of aircraft types. The Federal Aviation Administration (FAA) considers residences to be an "incompatible land use" with noise at or above 65dB this CNEL level.

To identify potentially impacted populations, the anticipated population within the 65 dB CNEL contour was calculated by the following steps:

1. Calculating the percentage of TAZs that would lie within a 65 dB CNEL contour
2. Assigning the SCAG projected population to the TAZ
3. Applying the demographic breakdown of the TAZ as a whole to the population within the 65 dB CNEL contour

For the purposes of this study, Aviation Noise Areas are defined as areas that are adversely affected by aircraft and airport noise.

Gentrification and Displacement

The integration of transportation and land use has been recognized for its ability to reduce vehicle miles traveled, air pollution, greenhouse gases while increasing physical activity. However, there are concerns associated with transit oriented development. Specially, there has been criticism of smart growth in relation to affordability. Some opponents have suggested that concentrating growth in cities and towns to avoid sprawl can lead to higher household costs, an effect completely opposite of what was intended.

In some cases where transit service has spurred significant new TOD, the result can be that people with average incomes are unable to afford to buy homes in or near the new developments. This highlights the need for strategies that, at a minimum, set aside some portion of new development and surrounding households as affordable housing adjacent to transit and in surrounding households.

In response to these concerns, this analysis evaluates 125 transit oriented communities to study key trends between years 2005 and 2009. Specifically, the analysis will compare the following performance indicators: growth in population and households, income, percent of elderly, percent of Hispanic population. The results will help SCAG and our partners to better understand what demographic shifts occurred from the development of TOD along urban and commuter rail lines. It will also serve as baseline data for comparison in future RTP cycles.

Air Quality Impacts Along Freeways and Highly Traveled Corridors

The concentration of air pollutants along heavily traveled corridors, particularly PM₁₀ and PM_{2.5}, is a major concern in Southern California. SCAG will identify major corridors defined as urban roads with 100,000 average daily trips and rural roads with 50,000 daily trips. Next, SCAG will overlay the income, race and ethnic composition of those households within 500 feet of the corridor. This analysis will allow SCAG to better understand the impacted populations and allow for greater outreach to those communities of concern.

Rail-Related Impacts

Environmental pollution from the movement of freight is becoming a major public health concern at the national, regional and community levels. The distribution of freight involves an entire system of transportation facilities, including seaports, airports, railways, truck lanes, logistics centers, and border crossings. The distribution of goods involves diesel-powered vehicles and equipment at almost every step of the way, resulting in significant emissions of particulate matter (PM), nitrogen oxides (NO_x), hydrocarbons, and other air toxics throughout the process. SCAG proposes to address rail related impacts in the Environmental Justice analysis for the 2012 RTP/SCS. This analysis may include potential impacts such as noise, pollution, accidents, and local impacts to residents such as delay at rail crossings.

Impacts of Pricing Strategies

As part of the SCAG Regional Congestion Pricing Study, equity impacts of likely projects will be estimated. First, this analysis will define the groups to be analyzed based on income, race, ethnicity, age, and factors as appropriate. Secondly, the impacts on the defined environmental justice communities will be modeled using the Southern California Economic and Equity Model. The results will be presented in the Environmental Justice appendix for the RTP/SCS. Finally, SCAG will include a mitigation toolbox to reduce hardships such as pricing exemptions or changes in the distribution of revenue obtained.

ENVIRONMENTAL JUSTICE MITIGATION TOOLBOX

Gentrification and Displacement

- Inclusionary zoning policies
- Community Benefits Agreements

If necessary, displacement impacts should be mitigated with specific relocation measures as dictated by local, state or federal requirements on a project-by project basis. Such measures include assistance in finding a new location, assistance with moving, or compensation for losses. Where it has been determined that displacement is necessary and displaced individuals are eligible, a relocation assistance program consistent with the State Uniform Location Assistance and Real Properties Acquisition Policies Act provides compensation and assistance in finding new residence for displaced individuals.

- Design roadway improvements that minimize barriers to pedestrians and bicyclists, as feasible. During the design phase, pedestrian and bicycle routes should be determined that permit connections to nearby community facilities.

Air Quality Impacts Along Freeways and Highly Traveled Corridors

- Set technology forcing new engine standards
- Reduce emissions from the in-use fleet
- Require clean fuels, such as electric vehicles
- Work with US EPA to reduce emissions from federal and state sources
- Pursue long-term advanced technology measures

- Improvements and Enhancements to California's Smog Check Program
- Expanded Passenger Vehicle Retirement
- Modifications to Reformulated Gasoline Program
- Cleaner In-Use Heavy-Duty Trucks
- Ship Auxiliary Engine Cold Ironing and Other Clean Technology
- Cleaner Ship Main Engines and Fuel
- Port Truck Modernization
- Clean Up Existing Commercial Harbor Craft

Rail Related Impacts

- Accelerated Introduction of Cleaner Line-Haul Locomotives
- Construct sound reducing barriers between noise sources and noise-sensitive land uses
- Improve the acoustical insulation of dwelling units where setbacks and sound barriers do not sufficiently reduce noise
- Implement, to the extent feasible and practicable, speed limits and limits on hours of operation of rail and transit systems, where such limits may reduce noise impacts

Road Pricing Mechanisms

- Transit, vanpools, or other options as alternatives in locations not served by transit
- Upper limits on road pricing
- Exemptions or discounts for persons who are disadvantaged people such as those whose earnings are below a certain income level and people with disabilities
- Limits on the number of priced crossings in a period for cordon charges.
- Allowances for unlimited use of priced facilities in certain periods, typically off-peak hours and holidays

SB 375 Greenhouse Gas Emission Targets

California's Sustainable Communities and Climate Protection Act, or Senate Bill (SB) 375, requires SCAG to develop a Sustainable Communities Strategy (SCS) to reduce greenhouse gas (GHG) emissions from automobiles and light trucks through integrated transportation, land use, housing and environmental planning. The SCS is described in Chapter 4 and provides a plan for meeting the greenhouse gas emission reduction targets set by the California Air Resources Board (ARB) for the SCAG Region. The 2012 RTP/SCS will result in achieving an 8 percent per capita reduction for 2020 and 16 percent per capita reduction for 2035, thus exceeding the targets set by the ARB for 2035.

Transportation Conformity

Transportation conformity is required under CAA section 176(c) to ensure that federally supported highway and transit project activities "conform to" the purpose of the SIP. Conformity currently applies to areas that are designated non-attainment, and those re-designated to attainment after 1990, maintenance areas, with plans developed for the specific transportation related criteria pollutants. Conformity for the purpose of the SIP means that transportation activities will not cause new air quality violations, worsen existing violations, or delay timely attainment of the relevant NAAQS. The conformity tests and analyses are: regional emissions analysis, timely implementation of Transportation Control Measures, financial constraint analysis, and public involvement (see Transportation Conformity appendix for details). The Regional Council makes the conformity determination finding as part of the approval of the 2012 RTP.

| Required Element | Addressed |
|---|--|
| <p>CGC Section 65080(b) (2).(G) <i>Prior to adopting a sustainable communities strategy, the metropolitan planning organization shall quantify the reduction in greenhouse gas emissions projected to be achieved by the sustainable communities strategy and set forth the difference, if any, between the amount of that reduction and the target for the region established by the state board.</i></p> | <p>Reference: 2012 RTP/SCS Chapter 4: Sustainable Communities Strategy, p. 105</p> |
| <p>CGC Section 65080(b) (2).(J) <i>Neither a sustainable communities strategy nor an alternative planning strategy regulates the use of land, nor, except as provided by subparagraph (I), shall either one be subject to any state approval. Nothing in a sustainable communities strategy shall be interpreted as superseding the exercise of the land use authority of cities and counties within the region. Nothing in this section shall be interpreted to limit the state board's authority under any other provision of law. Nothing in this section shall be interpreted to authorize the abrogation of any vested right whether created by statute or by common law. Nothing in this section shall require a city's or county's land use policies and regulations, including its general plan, to be consistent with the regional transportation plan or an alternative planning strategy. Nothing in this section requires a metropolitan planning organization to approve a sustainable communities strategy that would be consistent with Part 450 of Title 23 of, or Part 93 of Title 40 of, the Code of Federal Regulations and any administrative guidance under those regulations. Nothing in this section relieves a public or private entity or any person from compliance with any other local, state, or federal law.</i></p> | <p>The RTP/SCS complies with this general requirement</p> |
| <p>CGC Section 65080(b) (2).(K) <i>Nothing in this section requires projects programmed for funding on or before December 31, 2011, to be subject to the provisions of this paragraph if they (i) are contained in the 2007 or 2009 Federal Statewide Transportation Investment Program, (ii) are funded pursuant to Chapter 12.49 (commencing with Section 8879.20) of Division 1 of Title 2, or (iii) were specifically listed in a ballot measure prior to December 31, 2008, approving a sales tax increase for transportation projects. Nothing in this section shall require a transportation sales tax authority to change the funding allocations approved by the voters for categories of transportation projects in a sales tax measure adopted prior to December 31, 2010. For purposes of this subparagraph, a transportation sales tax authority is a district, as defined in Section 7252 of the Revenue and Taxation Code, that is authorized to impose a sales tax for transportation purposes.</i></p> | <p>The RTP/SCS complies with this general requirement</p> |

| Required Element | Addressed |
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| <p>CGC Section 65080(b) (2).(E) <i>Each metropolitan planning organization shall adopt a public participation plan, for development of the sustainable communities strategy and an alternative planning strategy, if any, that includes the following:</i></p> | <p>Reference: 2012 RTP/SCS Chapter 6: Public Participation Plan, p. 191 2012 RTP/SCS Appendix 16: Public Participation</p> |
| <p>(i) <i>Outreach efforts to encourage active participation of a broad range of stakeholder groups in the planning process, consistent with the agency's adopted Federal Public Participation Plan, including, but not limited to, affordable housing advocates, transportation advocates, neighborhood and community groups, environmental advocates, home builder representatives, broad-based business organizations, landowners, commercial property interest, and homeowner associations.</i></p> | <p>The RTP/SCS details planning efforts that comply with and exceed the requirements. SCAG met extensively with partner agencies, non-profit, advocacy, neighborhood and community groups beginning with target setting consultation and continuing through the workshop process.</p> <p>Reference: 2012 RTP/SCS Chapter 6: Public Participation Plan, p. 191 2012 RTP/SCS Appendix 16: Public Participation</p> |
| <p>(ii) <i>Consultation with congestion management agencies, transportation agencies, and transportation commissions.</i></p> | <p>Reference: 2012 RTP/SCS Chapter 6: Public Participation Plan, p. 191 2012 RTP/SCS Appendix 16: Public Participation</p> |
| <p>(iii) <i>Workshops throughout the region to provide the public with the information and tools necessary to provide clear understanding of the issues and policy choices. At least one workshop shall be held in each county in the region. For counties with a population greater than 500,000, at least three workshops shall be held. Each workshop, to the extent practicable shall include urban simulation computer modeling to create visual representation of the sustainable communities strategy and the alternative planning strategy.</i></p> | <p>The RTP/SCS details planning efforts that comply with and exceed the requirements. SCAG held 18 workshops throughout the region, in addition to countless local agency planning sessions.</p> <p>Reference: 2012 RTP/SCS Chapter 6: Public Participation Plan, p. 191 2012 RTP/SCS Appendix 16: Public Participation</p> |
| <p>(v) <i>At least three public hearings on the draft sustainable communities strategy in the regional transportation plan and alternative planning strategy, if one is prepared. If the metropolitan transportation organization consists of a single county, at least two public hearings shall be held. To the maximum extent feasible, the hearings shall be in different parts of the region to maximize the opportunity for participation by members of the public throughout the region.</i></p> | <p>Reference: 2012 RTP/SCS Chapter 6: Public Participation Plan, p. 191 2012 RTP/SCS Appendix 16: Public Participation</p> |
| <p>(vi) <i>A process for enabling members of the public to provide a single request to receive notices, information and updates.</i></p> | <p>Reference: 2012 RTP/SCS Chapter 6: Public Participation Plan, p. 191 2012 RTP/SCS Appendix 16: Public Participation</p> |
| <p>CGC Section 65080(b) (2).(F) <i>In preparing a sustainable communities strategy, the metropolitan planning organization shall consider spheres of influence that have been adopted by the local agency formation commissions within its region.</i></p> | <p>Reference: 2012 RTP/SCS Appendix 4: Integrated Growth Forecast</p> |