

NEW ONE PASEO

TRANSPORTATION DEMAND MANAGEMENT

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FINAL

A MIXED-USE DEVELOPMENT
DEL MAR HEIGHTS ROAD & EL CAMINO REAL
SAN DIEGO, CA 92130

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Transportation Demand Management (TDM) and San Diego Region Jurisdictions¹

The San Diego region has grown rapidly over the last 40 years, with a population increase of nearly 60 percent. According to the 2050 Regional Growth Forecast, the population will continue to grow by an additional 33 percent, reaching 4.4 million residents in the next 40 years. Meeting the transportation needs of this growing population requires a comprehensive and multimodal approach. Some solutions include capital projects like new rail infrastructure, High Occupancy Vehicle (HOV) lanes, managed lanes, and bicycle network improvements. Other solutions include enhanced or increased public transit services such as Bus Rapid Transit, trolley, and commuter rail. While these projects require considerable time and resources to plan and implement, programs and services that reduce or manage travel demand (Transportation Demand Management or TDM) are cost effective, flexible, and can be executed in shorter time frames. While TDM will not eliminate the need for new transportation infrastructure or services, it does contribute to the effective and efficient use of the region's transportation infrastructure.

In October 2015 the San Diego Association of Governments (SANDAG) adopted San Diego Forward: The Regional Plan. This comprehensive document combines the two existing planning documents: The Regional Comprehensive Plan and the Regional Transportation Plan and its Sustainable Communities Strategy, into one updated planning document. Together, these plans will guide the Growth of the San Diego region for the next 35 Years.

Defining TDM

TDM refers to a variety of strategies that change travel behavior (how, when, and where people travel) in order to improve transportation system efficiency and achieve key regional objectives, such as reduced traffic congestion, increased safety and mobility, and energy conservation and emission reductions (Victoria Transport Policy Institute). Typical TDM programs reduce Single Occupant Vehicle (SOV) trips through ridesharing initiatives such as carpooling and vanpooling; alternative work schedules and teleworking; and the use of transit, biking, and walking to work. However, TDM strategies should not be limited to just commuting trips. TDM strategies, programs, and plans are most effective when considered for all trips and at all geographic levels--from a specific site, to a neighborhood, city, and regional or state levels – creating a comprehensive and coordinated approach.

TDM is a key component of San Diego Forward: The Regional Plan as a cost effective means for easing traffic congestion and reducing air pollution, while improving the commute for thousands of San Diego region residents.

"iCommute" is the TDM program in the RTP for the San Diego region's Sustainable Communities Strategy. iCommute programs encourage and incentivize sustainable transportation choices by providing free online ride matching services, a regional vanpool program, transit support, bicycle encouragement programs, the Guaranteed Ride Home program, and School Pool. Participation by commuters and employers in TDM programs is voluntary in the San Diego region. In the early 1990's TDM regulations in the San Diego region required employer trip reduction plans. These regulations were enacted when the federal government designated the region's air quality

¹ Integrating Transportation Demand Management Into the Planning and Development Process (SANDAG Publication May 2012)

as “severe.” In 1995 the Federal government reclassified the region’s air quality designation from “severe” to “serious”, and the TDM regulations were rescinded.

The SANDAG study calls for design strategies that encourage active transportation (walking and biking to transit or work) and recreation for neighborhoods, streets and outdoor spaces.

Key strategies include the following:

- Mixed land uses in city neighborhoods
- Improved access to transit and transit facilities
- Improved access to recreational facilities such as parks, plazas and open spaces
- Improved access to full-service grocery stores
- Accessible, pedestrian-friendly streets with high connectivity, traffic calming, landscaping and public amenities
- Facilitate biking for transportation and recreation through bicycle networks and infrastructure

The overall design and project goals incorporated into the New One Paseo project achieve these fundamental strategies.

“When TDM supporting amenities are provided within developments, it becomes much easier for tenants to change their transportation choice. For example, when office buildings offer showers and secure bike parking they will see an increase in walking and biking. Carpooling and vanpooling increase when priority parking spaces are set aside for HOVs.”

- SANDAG 2050 Regional Transportation Plan
adopted October 28, 2011

TRANSPORTATION DEMAND MANAGEMENT (TDM) NEW ONE PASEO

Commuters base their travel choices on a desire to save time and money, reduce stress, improve the environment and their health, and other considerations. The New One Paseo TDM strategy is to address these personal and business motivations with targeted outreach, education and public awareness campaigns combined with the resources and incentives needed to change travel behavior.

Goals and Objectives

- Reduce peak hour congestion.
- Provide for a balanced approach to mobility.
- Enhance safety and convenience for vehicles, bicyclists, and pedestrians.
- Reduce parking demand.
- Maximize the functionality of current and future parking supply.
- Execute sustainability practices detailed in LEED for Neighborhood Development.
- Reduce greenhouse gas emissions.
- Support Kilroy Realty Corporation's sustainability program.
- Facilitate a coordinated transportation approach with the overall neighborhood.

Integrating Transportation Demand Management into the Project

TDM deals directly with the basic demand for travel by affecting mode, time of day, frequency, and path of travel. TDM includes a broad range of synergistic actions to reduce single occupant vehicular travel. These strategies are intended to improve the efficiency of the existing transportation system by encouraging use of alternate travel modes to the single-occupancy vehicle (SOV).

Strategies

- Ridesharing, Preferential Carpool Parking and Parking Strategies.
- Parking cash-out incentives (Cash incentive in lieu of free parking for choosing not to drive to work alone).
- Pedestrian and Bicycle connections and circulation Improvements.
- Cycling storage and amenities.
- Electric Vehicle Charging Stations.
- Shuttle Program to the Solana Beach Coaster station.
- Transportation Coordinator/TDM Sustainability Coordinator.
- Tenant/Resident/Staff best practices education such as staggered work hours.
- Public Transit Enhancements for the future.
- Carsharing/Bikesharing promotions.
- Trip Reduction Membership Program.

TDM PLAN RECOMMENDATIONS

OVERVIEW

The project's goal is to provide safe, appealing, and comfortable street environments to encourage pedestrian use. This is accomplished in part via street features, such as human-scaled buildings and street widths, wide sidewalks, paseos that create inviting pedestrian environments,, activated retail storefronts and interesting street furniture and trees which will create a safe, inviting, and well-used public realm with visual interest.

Specifically, the project site design and features support the use of alternative modes of transportation by encouraging on-site amenities, programs, and incentives such as the use of car sharing/van pool vehicles, bicycle lockers, food and child care services, links to guaranteed ride home programs, and commuter benefits.

A Community Association ("Association") which will likely include all property owners within the project as members, will implement the TDM program contained herein and promulgate guidelines, rules and regulations as necessary for efficient operation. It is important that the Association have flexibility to manage parking and transportation issues which are specific to the needs of the tenants, employees, residents and guests to insure a great experience for all while achieving the goals of the TDM Plan.

MEASURES

Ridesharing, Preferential Carpool Parking and Parking Strategies

Carpool preferential parking will be offered on-site in a variety of locations throughout the development. Carpool and/or shared-use vehicle parking spaces will be provided to encourage peak hour rideshare commuting equivalent to 10% of the total automobile parking for each office building on the site. Signage indicating such parking spaces will be provided, and the parking spaces will be within 200 feet of entrances to the buildings served. A One Paseo Master Association (Association) parking permit will be required (one per carpool), and participants must apply for a carpool placard through the Association. The program is open to residents, tenants and employees.

Shared parking strategies were utilized in the development of the overall site plan. The mix of land uses planned for the site makes it natural and more efficient for the use of shared parking, consistent with the Shared-Parking section of the City's Land Development Code, Section 142.0545. As an example of shared parking, the peak times in activity for businesses such as an office and retail are complementary of one another as is their demand for parking. For mixed-use development, not sharing parking and building separate parking facilities for each use is a waste of space and resources that could be used to enhance the project and add amenities.

The City of San Diego approved the [proposed](#) number of parking spaces to be built for the completed project site based on a Shared Parking Analysis. The objective is to properly serve future residents, tenants and customers but not overbuild parking spaces. In order to do so, a Shared Parking Model was approved by the City of San Diego which projects parking demand based on a number of factors (proposed program data, site conditions, market demand, current information from the Urban Land Institute Shared Parking 2nd Edition 2005, and focused parking studies of specific land uses).



Pedestrian and Bicycle Circulation Improvements

In the built environment, places are defined by their blocks and streets. Blocks need to be walkable in length and organized into a fine-grained pattern for an increased sense of location and direction. Pedestrian-friendly blocks typically range somewhere between 300 and 600 feet, with longer blocks broken by paseos (refer to General Plan Policies UD-C.6d). New One Paseo is broken up into several small segments to create a multi-functional walkable environment.

Paseos, defined as “a slow, easy stroll outdoors along a street or series of streets”, are spaces specifically for pedestrians integrated into the overall circulation network, and connect to the larger more public open spaces. They reduce the overall block length, extend retail and dining opportunities, and reinforce the pedestrian scale at sidewalk level (refer to General Plan Policies UD-C.6d). These types of spaces offer connections to residential lobbies, parking facilities and other types of open spaces throughout the project.

The bicycle is an important means of transportation. As an alternative to the automobile, a well-planned bicycle network can promote a low-cost, quiet, non-polluting, and healthy mode of transportation. The project’s vision aims to provide a safe and convenient bicycle route network that encourages bicycle use and provides ample amenities for cyclists. The project is designed to connect on-site *bicycle* routes to the existing community *bicycle network* of at least 5 continuous miles in length within ¼ mile bicycling distance of the project boundary. Wayfinding signage with direction on how to bike to the nearest transit or shuttle stop and bike trail linkages should be installed.

Class II Bike Lane: These facilities are often referred to as bike lanes. Bike lanes provide a striped and stenciled lane for one-way travel on a street or highway. When properly designed, bike lanes help improve the visibility of bicyclists. Class II bike lanes currently exist along Del Mar Heights Road and El Camino Real along the project boundary.

Class III Bike Route: Generally referred to as a bike route, it provides for shared use with pedestrian or motor vehicle traffic and is identified only by signing. This is recommended when there is enough right-of-way for bicyclists and motorists to safely pass. Class III bike routes will be provided within the interior of the project boundary, as seen in Fig 1b..



Bicycle Parking

Bicycle parking will be fully accessible and convenient. Primary bicycle parking areas will be concentrated along major building entrances, and public plazas. The locations are predominantly adjacent to existing or proposed bicycle routes. The proposed locations will facilitate a seamless transition from bikeway to secure bike parking so riders will not need to dismount and “walk” their bikes. Great care should be taken in designing and implementing bicycle parking areas to preserve aesthetics and maintain community values. Bike racks and lockers should also be installed near building entrances along the paseos. Secondary internal drives should also be outfitted with bicycle parking to provide for direct access to commuters.

The following measures are suggested:

- Adopt a standard bicycle rack design for future installations. At a minimum, a favorable bike rack style includes the following: a stable structure and an anchored, permanent foundation; a design that prevents bicycles from being tipped over; a design to accommodate a wide range of bike styles; and space to secure the frame and one or both tires.
- Develop a systematic bicycle rack replacement program to phase out obsolete rack styles. To encourage cyclists to park in the primary bicycle parking areas, rack replacement or installation within these areas should be prioritized.
- Introduce secure bicycle parking (e.g., bike lockers, bike rooms, etc.) within residential and office buildings and the proposed parking garages. It is envisioned that office building bicycle parking will be provided free of charge to tenants participating in the *OPCommute* program on a first-come-first serve basis or through a lottery. Secure bicycle parking within parking/office structures will be accessible only to those who have the service, likely on a bi-annual basis. All secure bicycle parking facilities will contain bike racks within a locked perimeter barrier accessible only to participants in the program. Secure, enclosed bicycle storage areas must be locked and easily accessible to residents and/or workers.



Bicycle Support Services & Amenities

Education – Measures will be taken to increase awareness of the bicycle network on-site as well as in the community, how to safely ride a bike, and how to properly maintain a functioning bike.

- *Bike Network Awareness* – Publicize and distribute the Regional bike network plan San Diego Regional Bike Map, and <http://www.ridethecity.com/sandiego> provide information on the *OPCommute* Web site to include an online form for reporting maintenance issues; increase content and frequency of presentations on the bicycle network and viability as a work/school commute mode.
- *Safe Cycling* – Offer presentations throughout the year (May 2 Bike to Work Day, June 3 Dump the Pump Day, October Rideshare Month) focused on bicycle safety and offer incentives to encourage attendance; develop marketing campaigns to address common safety concerns or to target specific markets (e.g., incoming tenants, community events, etc.).

Amenities

- Showers and lockers in office buildings for employees who bike, walk or run to work.



Electric Vehicle Charging Stations

Electric charging stations will be a part of the long-range parking strategy for the project; while Electric Vehicle Charging Stations are not a direct TDM measure, they do assist in supporting the project's overall sustainability goals. More importantly, one of the most successful vehicle sharing programs in the region, Car2Go, is wholly dependant on a successful and broad base network of EV charging stations. Although Car2Go does not currently include Carmel Valley in its service area, the goal is to be ready when electric vehicle car-sharing programs such as Car2Go do expand their current service areas in the region.



Shuttle Program

Provide an on-site shuttle program that will be phased in as the project reaches final build-out. Initial implementation of the shuttle program will include convenient shuttles running during midday intervals to provide mobility options to the Employment Center in Carmel Valley (e.g. High Bluff Drive and El Camino Real).

The shuttle will include an am/pm peak time and a lunch time route that would generally run from the project site to the Solana Beach Coaster Station. The frequency of operation and the route will be evaluated periodically to gauge the benefit of ridership in relation to operational costs. The frequency of operation and the route may be adjusted from time to time based on market demand for the service. The shuttle will have the ability to transport bicycles.

A shuttle stop may be added to serve children from the New One Paseo project to their designated local public school once the residential portion of the project is built out and a sufficient market demand exists to serve the children that may reside in the project.

Parking Cash-out

Encourage employers (through education and leasing agreements) to provide a "parking cash-out" option to employees who do not drive. Financial incentives for ridesharing are currently available to reduce costs through the SANDAG commute program, and employers are allowed to offer payroll tax savings for transportation assistance up to \$245 a month per employee for transit passes or vanpool vouchers (as of 2015 published incentive rates). Pre-tax programs offer savings to employers as well as employees. Transit subsidies can be deducted as a business expense. When funds are removed from paychecks before taxes are applied, employers save on payroll taxes.

Tenant/Resident/Staff Resources

Create a message board or regular emails to an opt-in list. Provide links to regional plans and best practices by government agencies and third parties via a web-site targeted for tenants, residents and staff via a specific web-site link associated with the project. The website could be: *OPCommute.com* initially.

Provide Information regarding:

- Flexible Work Schedule/Telecommuting Policies to reduce peak hour Single Occupancy Vehicle (SOV) trips.
- Biking links
- Walking, Carpooling, Vanpooling, Shuttles, E-Charge, What’s New



Figure 1a: Mobility Plan

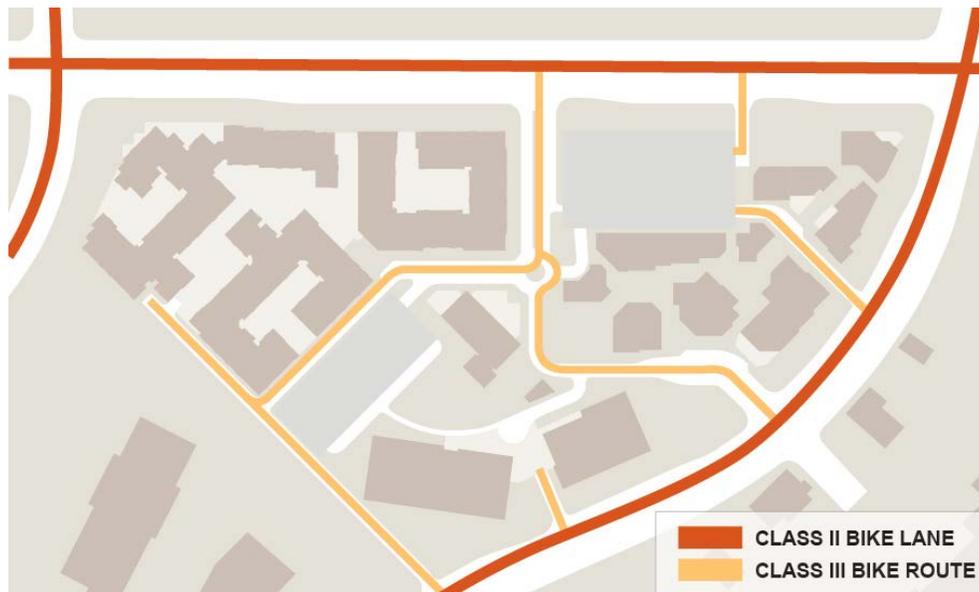


Figure 1b: Bicycle Circulation

Transportation Coordinator/TDM Sustainability Coordinator/Parking Management Coordinator

Implementation of the overall TDM plan and parking management will be the responsibility of the Community Association. The Association may retain one or more operators to implement such programs. The Association may work with local established advocacy groups such as Circulate San Diego, Bike San Diego and the San Diego County Bicycle Coalition to promote and manage alternative transportation programs. SANDAG has also established a successful commute program which offers assistance and tools to commuters and employers. Consideration will be given to utilizing the service bureau of one of these organizations in lieu of funding an on-site transportation/TDM Sustainability coordinator (Coordinator).

The Coordinator will provide the following services with overall goal to reduce SOV trips during peak hours:

- Provide marketing and outreach for all TDM programs including presentations to tenants, staff and community members at large.
 - * Create flyers
 - * Letters to employees
- Act as the primary point of contact for residents, employees and tenants, and patrons of New One Paseo wanting to travel using an alternative mode.
- Promote services and resources available through OPCommute.com such as:
 - Emergency Ride Home Guarantee
 - Ride Matcher resources
- Offer individualized trip planning to residents, employees and tenants of New One Paseo. Trip planning is a customer-based service through which the coordinator can suggest and possibly arrange commute options, ranging from a rideshare match to recommending bike routes. Given

the close proximity of two train stations to the site, trip planning via the Coaster and Amtrak should be considered.

- Conduct annual surveys and provide reports to assess user satisfaction and quantify TDM effectiveness. Reports will be made available upon request by the City for informational purposes only. Typical measures of effectiveness include the following: Eco-vehicle ride share program utilization; preferential carpool parking utilization; pedestrian and bicycle counts; transit/shuttle ridership; bicycle parking utilization, number of employees participating in a parking cash out program, parking occupancy counts; and number of public relations events held.

Transit Enhancements

Figure 2. Regional Transit Plans



Source: City of San Diego General Plan Mobility Element
Figure ME-1 Transit Land Use Connections

The Transit Planning function is not controlled by the project applicant: it is controlled by SANDAG as the regional planning agency. However, a Bus Rapid Transit line is identified in the current 2050 Regional Transportation Plan (RTP) and a *Lower Frequency Bus Service* (identified in Figure ME-1 pg. ME-5 of the General Plan) has previously served the perimeter of the site.

According to SANDAG, “As part of the 2050 revenue constrained plan, Rapid Bus Route #473 runs from Oceanside to UTC via Highway 101 Coastal Communities and Carmel Valley. It has both a peak and off-peak headway of 10 minutes, is to be built in the 2030 period, and its capital improvements cost is \$127 million.”

The project is ranked 19 of 53 transit projects in the 2050 RTP. Figure 1a shows a proposed bus stop location that would be provided to serve the Bus Rapid Transit line proposed along El Camino Real on the perimeter of the project.

A second transit route, #653, will run Peak Period Bus Rapid Transit on the I-5 (15 minute headways) by 2035, to connect Mid-city to Palomar Airport Road. However, it is unknown at this time if this BRT on the I-805/I-5 will have a stop in Carmel Valley. If it were to stop at Del Mar Heights Rd and the I-5, it would be approximately ½ mile walking distance from New One Paseo to a potential I-5 BRT station. This route will provide access to the Oceanside, and Solana Beach Coaster stations, where riders would have access to both rail (Amtrak, Coaster, Trolley and Sprinter) and local bus lines.

Carsharing/Bikesharing

Carsharing is gaining momentum in the United States, especially in urban areas and near college and corporate employment campuses. Carsharing is promoted as an alternative to vehicle ownership and is particularly well suited for occasional use, and to allow the commuter to travel the “last mile” between the transit terminal and the workplace and back. This strategy is similar to a rental car service and is effective as long as vehicles are reliable and accessible and pick-up locations are convenient.

Carsharing has the potential to expand as more participants become familiar with the program and understand the benefits. User costs typically consist of an annual membership fee, a nominal hourly rental cost, and a user fee per mile driven. These costs cover all vehicle charges including fuel and insurance. Special rates are common for longer distance trips or for extended periods of time. Carsharing is commonly available to licensed drivers 18 years of age or older, whereas traditional car rentals are typically accessible only to clients 21 or 25 years and older.

San Diego also became the first city in the United States with an all-electric car-sharing system in 2013. By providing ample EV charging stations and preferential parking locations, the probability of encouraging alternatives to vehicle ownership and single occupancy vehicle trips is greatly increased.

Bikeshare is the latest San Diego initiative to reduce automobile use. Bike-sharing programs have increased in popularity around the world as some commuters have left their cars behind in favor of riding to work and cities have tried to use the programs to ease traffic congestion. As with car-sharing, bike-sharing can provide the means to travel the “last mile” between the transit terminal and the workplace and back. Bike-rental systems have been successful in several cities throughout the United States. The University of California Transportation Center estimated there were 165 cities with sharing programs in the world that use 237,000 bikes as of May 2011. San Diego’s bike-share program is expected to be run completely by private entities and cost taxpayers nothing. The San Diego County Bicycle Coalition participated in San Diego’s recent steps to build the nation’s largest bike-friendly business improvement district program, already showing a positive impact on neighborhood commercial districts. Information about the City of San Diego’s Bikeshare Program can be found at <http://www.sandiego.gov/tsw/pdf/decobikefaq.pdf>

With the extensive commitment to bicycle infrastructure provided at the New One Paseo project, it is anticipated that it will be an ideal location for implementing a bike-share program within the Carmel Valley area. The City’s Bicycle coordinator may be a resource to discuss future expansion of the City’s existing bike-share program into the Carmel Valley area.

Trip Reduction Membership Program

The One Paseo Association will have the option to implement TDM elements as standalone initiatives (e.g., reduced rate transit pass options, carpool program, etc.) or consolidate them to one “umbrella” trip reduction program. Successful examples of a consolidated program include Stanford University’s Commute Club and the City of San Diego’s Transportation Alternatives Program (TAP).

A single trip reduction membership program could provide the following benefits:

- Provide consistent branding of the program and streamlined, cost-effective marketing.
- Bundle incentives and provides equitable membership benefits.
- Reduce confusion and redundancy of multiple programs.

- Simplify TDM evaluation and reporting of performance indicators. It is difficult to isolate the effectiveness of a singular TDM strategy when many are offered. TDM is best viewed as a combination of complementary components.
- Heighten profile of commitment to sustainable practices, employee work/life balance, and the quality of the life throughout the community of Carmel Valley.

The Transportation/TDM Sustainability Coordinator will work to coordinate all of the following TDM strategies to track and enhance the effectiveness of these measures.

TDM PLAN RECOMMENDATIONS TABLE

RECOMMENDATION	TARGETED AUDIENCE	IMPLEMENTATION
Ridesharing, Preferential Carpool Parking and Parking Strategies	Entire Community	Upon occupancy of 1st office building or 2nd residential building , whichever occurs first
Pedestrian and Bicycle Circulation Improvements	Entire Community	With incremental buildout of private driveway and walkways
Bicycle Parking	Entire Community	Upon occupancy of each office and residential building
Electronic Vehicle Charging Stations	Entire Community	Will be provided with the construction of each of the parking structures
Shuttle Program	Entire Community	Upon occupancy of the second office building or the third residential building, whichever occurs first.
TENANT/RESIDENT/STAFF RESOURCES		
• TDM Resource Website	Entire Community	Upon occupancy of 2nd office building or 3rd residential building , whichever occurs first
• Transit Enhancements	Entire Community	Controlled by Regional funding sources – Not within control of project developer
• Carsharing/Bikesharing	Entire Community	Market driven by third party providers willing to expand programs based on market demand
• Trip Reduction Membership Program	Entire Community	Upon occupancy of 2nd office building or 3rd residential building, whichever occurs first.

REFERENCES

1. *Integrating Transportation Demand Management into the Planning and Development Process* a reference for cities (May 2012)
http://www.sandag.org/uploads/publicationid/publicationid_1663_14425.pdf
2. *Parking and Transportation Demand Management*
www.greatcommunities.org
3. *LEED 2009 for Neighborhood Development Rating System* [Created by the Congress for the New Urbanism, Natural Resources Defense Council, and the U.S. Green Building Council (Updated October 2013)]