

# City of Carlsbad Citywide Transportation Demand Management Plan

Approved by Carlsbad City Council Feb. 26, 2019

## Introduction

The State of California has set mandates to reduce greenhouse gas emissions (GHG) to 1990 levels by 2020 or 15 percent below 2005 levels by 2020. The City of Carlsbad is doing our part and adopted a Climate Action Plan in September 2015 to meet our required share of GHG emission reductions. The Climate Action Plan recognizes that Transportation Demand Management (TDM) is an important strategy to achieve the state's mandated targets. Transportation accounts for nearly 40% of greenhouse gas emissions and the purpose of TDM is to reduce the number of single occupancy vehicle trips among employees that work in Carlsbad.

TDM is an effective strategy to reduce GHG emissions by reducing vehicle miles traveled (VMT). Specifically, the Climate Action Plan targets single occupancy vehicle trips, or people driving alone, to and from work. Measure K-1 requires the following:

*K-1: Adopt a citywide transportation demand management (TDM) plan, as described in the General Plan Mobility Element, detailing a mix of strategies to reduce travel demand, specifically of single occupancy vehicles. SANDAG's 2012 "Integrating Transportation Demand Management Into the Planning and Development Process"<sup>42</sup> provides a guide to designing and implementing a TDM plan and will be used as a reference document to develop the city's TDM plan. TDM strategies evaluated in the plan include parking ordinances, subsidized or discounted transit programs, transit marketing and promotion, carsharing, bikesharing, parking pricing, and bike parking. (Short-term)*

## The Plan

This citywide TDM plan outlines the framework within which city staff will operationalize TDM to meet the requirements of K-1 and ultimately the targets to reduce single-occupancy vehicle trips by 30% by the year 2035. Measure K-1 references the General Plan Mobility Element, which states that "TDM consists of programs and policies to reduce the demand for the single occupant automobile." Thus, the citywide TDM plan consists of the following elements:

1. Infrastructure
2. Regulations & Policies
3. Guiding Resources
4. TDM Program

### 1. Infrastructure

The ability of individuals or groups of individuals to choose alternative modes of transportation relies on the availability of a transportation network with adequate infrastructure to make other modes such as walking, biking, transit or carpooling viable. For example, a person is not likely to bike to and from work if there are not safe bike lanes available, if there are not clear bike routes from the street to their place of work, or if there are not showers available once they arrive at work.

The city's Sustainable Mobility Plan is an effort to examine alternative transportation options in a comprehensive way to present an existing and future network that will make it easier for individuals to understand and make varied transportation choices. The Sustainable Mobility Plan effort will prioritize infrastructure project to close gaps that are hindering the use of alternative modes of transportation like biking, walking, transit and safe routes to schools. A robust infrastructure network will provide more options for the community to choose one or a combination of transportation methods other than driving alone.

Infrastructure improvement projects identified through the Sustainable Mobility Plan will be incorporated into the city's annual Capital Improvement Program.

In addition to the Sustainable Mobility Plan, the city will evaluate appropriate TDM infrastructure improvements through other major city efforts, like the Village & Barrio Master Plan implementation.

Any new transportation services that is available in Carlsbad either through efforts led by the city or through partnership with regional transportation agencies such as SANDAG or NCTD also fall into the category of infrastructure. For example, should the city work with the business community to launch service to and/from transit stations to the city's industrial hub around McClellan-Palomar Airport, such service would be considered an infrastructure improvement to the city's network.

## **2. Regulations & Policies**

From the regulatory level, in addition to Measure K-1 of the Climate Action Plan, Measure K-2 of the plan requires adoption of a TDM ordinance. This ordinance places regulations on new non-residential development to install appropriate TDM infrastructure and programs at the individual development project level. This will be achieved by the development and city approval of project-specific TDM plans that development applicants will prepare when the project meets the determine threshold of average daily trips generate by employees. City staff will use industry standards to calculate average daily trips and determine the applicability of a project to submit a project-specific TDM plan.

In addition to the TDM ordinance, other major city efforts that affect the transportation effort from a policy level will consider which, if any TDM strategies would be appropriate. The Village & Barrio Master Plan is an example of such an effort. The plan addressed TDM by evaluating parking requirements in the geographic area of the plan, parking program elements and infrastructure improvements that would encourage all people in the Village & Barrio to consider transportation options, whether they are residents, employees or even visitors.

City staff will work with the city's Chief Innovation Officer to identify potential areas where TDM strategies can leverage technology effectively or to coordinate transportation-related innovation efforts with this plan.

## **3. Guiding Resources**

TDM is not something developers or businesses have an expertise in and will need consultative assistance. Carlsbad is at the forefront of municipal climate change by launching a proactive TDM plan. City staff believe an important part of the citywide TDM plan is appropriate assistance to make choices that are cost-effective and project-specific. The TDM ordinance references the TDM Handbook, which will serve as a "living" document to provide guidance to the development and business community on

how to implement TDM in a specific context. The handbook outlines a comprehensive list of strategies, details how the strategy can be implemented and which modes each strategy addresses.

Once the ordinance is approved and adopted, the TDM Handbook will be accompanied by more detailed information about TDM on the city's webpage, as well as an interactive online tool that will help filter the strategies in the TDM Handbook based on what an employer or developer wants to achieve.

The TDM Handbook is considered a "living" document because city staff expect to update the handbook based on experiences once developers and businesses start using the resource. It will be iterative so that as TDM plans are approved and implemented, staff can gain insight qualitatively and quantitatively on the effectiveness of each strategy within the Carlsbad context.

#### **4. TDM Program**

The TDM ordinance can only address new non-residential development. Staff recognizes that in order to meet our GHG reduction targets, proactive efforts must be made with the existing business community. Carlsbad is a significant regional employer and tens of thousands of employees commute into Carlsbad from outside the city. The TDM program will proactively identify, target and work with existing businesses to implement TDM plans. The most cost-effective way to implement a robust TDM program with the city's existing business community is to contract TDM consultant services with a qualified technical firm who will use best management practices and Carlsbad's position as a regional employment hub to expand the reach of TDM beyond the ordinance alone.

City staff will work with the TDM consultant to develop the TDM program, but the consultant will be expected to provide the following services in the first year.

- Establish stakeholder advisory committee consisting of a variety of stakeholders within the business, transportation and government sectors
- Update framework for and monitoring structure of the TDM program
- Conduct outreach to the existing business community

In addition to this work in the first year to set up the TDM program, the TDM consultant will also provide technical support for the TDM ordinance including review and monitoring of project-specific TDM plans. The TDM consultant will also conduct the monitoring of TDM efforts through both the ordinance and program.

#### **Monitoring & Reporting**

Monitoring for the program will be coordinated by a city staff member within the Community & Economic Development Department since implementation of the TDM Ordinance is being led by the Land Development Engineering Division and the TDM Program is being led by the Economic Development Division as a service and manner of support to the existing business community.

Community & Economic Development staff will provide updates to City Council annually on TDM efforts as part of the annual Climate Action Plan report.