City of Chula Vista Clean Transportation Energy Roadmap

Prepared through the SANDAG Energy Roadmap Program

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SANDAG

City of Chula Vista
Clean Transportation Energy Roadmap

Table of Contents

ACKNOWLEDGEMENTS AND PROGRAM CONTACTS ii

INTRODUCTION 1

SAVING ENERGY IN CITY GOVERNMENT OPERATIONS

1. Green the City Vehicle Fleet 5
2. Promote Commuter Benefits to City Employees 17

SAVING ENERGY IN THE COMMUNITY

3. Leverage Planning and Development Authority 23
4. Market Programs and Rebates to Residents, Schools, and Local Businesses 31

LOOKING FORWARD 35

APPENDICES

A. Chula Vista Climate Action Plan Mitigation and Adaptation Measures
B. Efficient Driving, Alternative Fuels, and Local Infrastructure Available
C. Alternative Fuel Vehicle Replacement Analysis
D. Employee Commute Benefit Resources
E. Sample Smart Growth Policies and Resources
F. Sample Clean and Efficient Transportation Policies and Resources

Acknowledgements and Program Contacts

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Introduction

The Clean Transportation Energy Roadmap ("Roadmap") can serve as a resource for the City of Chula Vista as it continues to promote clean transportation measures, both in its municipal operations and in the community. The Roadmap identifies petroleum reduction measures and tools, specific to the City, that generally result in cost savings and benefits to the environment, including:

The Roadmap charts a path to reduce petroleum consumed in City operations and in the community.

- An assessment of alternative fuel vehicles and fuel availability for the City's vehicle fleet.
- Commuter programs, including vanpools, carpools, and teleworking that the City could promote to its employees.
- Online tools to establish a baseline of petroleum consumed and greenhouse gases (GHG) emitted from employee commutes. Plus, ways to track annually!
- Smart growth and active transportation policies that enhance local walking and biking options.
- Outreach materials on Clean Transportation programs that can be shared with local residents, schools, and businesses.

The Roadmap supports the actions that Chula Vista already has taken in clean transportation.

The Roadmap also recognizes the significant steps that the City has taken already. Since 2000, Chula Vista has been implementing a Climate Action Plan that includes measures to reduce energy and fuel use at municipal facilities and throughout the community.

The petroleum reduction measures identified in this Roadmap help to implement the following mitigation measures from the City's Climate Action Plan:

- Mitigation Measure #1: Clean Vehicle Replacement Policy for City Fleet
- Mitigation Measure #2: Clean Vehicle Replacement for City-Contracted Fleets
- Mitigation Measure #6: Smart Growth around Trolley Stations

Section I. Saving Energy in Government Operations

Local governments can be significant users of energy in their own buildings, facilities, and fleets. City employees also play a role, through their commute choices, equipment usage, and use of government vehicles. Since City government operations require a great use of transportation energy, the City has the opportunity to lead by example and demonstrate ways to reduce transportation-related energy use and associated emissions. By increasing the fuel efficiency of its vehicles, expanding its use of cleaner fuels, and encouraging commuting options like the Trolley and biking, Chula Vista can spend fewer taxpayer dollars on fuel, contribute to cleaner air, and reduce GHG emissions. For these reasons, this section of the Roadmap focuses on two distinct opportunities for the City to lead by example:

1. **Green the City Vehicle Fleet**
2. **Promote Commuter Benefits to City Employees**

Section II. Saving Energy in the Community

Looking beyond its own operations, the City can play an important role in influencing the attitudes and actions of its residents and local businesses. Opportunities for influence vary widely, from public education to adopting policies and implementing programs to reduce congestion and provide travel choices other than driving alone. Chula Vista already has adopted policies to promote smart growth development, including through its General Plan, Urban Core Specific Plan, and Climate Action Plan. Chula Vista has produced a bicycle map for the City and identified safe routes to school for several local middle schools.

Fuel use can be a major expense for households and businesses, and it is a predominant source of air pollution and GHG emissions in most communities. Therefore, reducing inefficient or unnecessary fuel use benefits the environment and puts money in the pockets of households and businesses alike. Clean transportation efforts also support growing economic opportunities, including well-paying, green jobs.

This section of the Roadmap identifies the following opportunities for the City to lead its community with innovative programs for sustainability and climate change:

3. **Leverage City Authority over Planning and Development**
   - Smart growth development policies
   - Clean and efficient transportation options
4. **Market Programs and Rebates to Residents, Schools, and Local Businesses**

Recommendations for the City of Chula Vista

The following table highlights recommendations for the City from each Roadmap chapter.

Clean Transportation Energy Roadmap Recommendations
Green the City Vehicle Fleet
Provide list of efficient driving tips to employees to increase the efficient use of fleet vehicles and reduce petroleum waste
Utilize available incentives from state agencies for alternative fuel vehicles
During vehicle replacement, consider high efficiency and alternative fuel choices: • Hybrid vehicles for high-mileage sedans and sport utility vehicles • Compressed natural gas or propane for vans and trucks (check local fuel costs)
Promote Commuter Benefits to City Employees
Conduct an employee survey on existing commute habits and interest in alternative choices (with SANDAG assistance)
Obtain no-cost bike locker(s) for City facilities (with SANDAG assistance)
Continue to collaborate with iCommute on free “lunch and learn” programs and regional events like “Bike to Work” month
Participate in iCommute pilot programs that reduce solo driving
Use the IRS Commuter Fringe Benefit Program to offer pre-tax incentives to employees for biking, walking, or carpooling to work
Leverage Planning and Development Authority
Consider using the CEQA streamlining provisions of SB 375 for Transit Priority Projects
Apply for funds to plan and/or develop smart growth, biking, or walking enhancement projects (through SANDAG *TransNet* programs)
Incorporate Transportation Demand Management measures in the development review process
Continue to actively participate in regional planning efforts for alternative fuel and electric vehicle charging infrastructure
Market Programs and Rebates to Residents, Schools, and Local Businesses
Provide information to the community on clean transportation programs through the City Web site, newsletters, and libraries
Provide clean transportation information from the Roadmap at community events, PTAs, and local chamber meetings

About the Energy Roadmap Program

The SANDAG Energy Roadmap Program is funded primarily through a local government partnership with San Diego Gas & Electric® (SDG&E) to provide energy efficiency services to the local jurisdictions that do not have their own partnerships with the utility. In addition to energy efficiency, SANDAG provides clean transportation components that are available for all SANDAG member agencies. Since Chula Vista has its own successful SDG&E local government partnership, SANDAG focused on clean transportation opportunities for the City's Roadmap. The table below provides a timeline of the City of Chula Vista's Clean Transportation Energy Roadmap efforts.

Roadmap Timeline for the City of Chula Vista

March 2012	Spring 2012	Summer 2012	Fall 2012
Transportation Roadmap begins with City staff	Employee commute options researched with SANDAG iCommute	Planning options, Sustainable Communities Strategy included	Finalize and print Roadmap
City gives input and direction	CCSE performs fleet assessment for City	SANDAG drafts Roadmap chapters for City staff review	Present at City Council meeting or other venue

Each Energy Roadmap is consistent with the SANDAG 2050 Regional Transportation Plan and its Sustainable Communities Strategy (2011); Regional Energy Strategy (2009), which serves as the San Diego region's energy policy blueprint; and the Climate Action Strategy (2010), SANDAG's first ever guide on the issue of climate change. The strategies are available on the SANDAG Web site at www.sandag.org/energy.

1

Green the City Vehicle Fleet

The City of Chula Vista maintains a fleet of approximately 560 vehicles that range from sedans and pick-up trucks to fire engines and other heavy-duty trucks. The City can achieve transportation-related energy savings through actions that promote fuel conservation, efficiency, and an increased use of clean, alternative fuels in its vehicle fleet.

Chula Vista has recognized that fleet operations contribute significantly to its total energy use, and has adopted practices to ensure the fleet is operated as efficiently as possible. As part of this effort, the fleet includes hybrid vehicles and vehicles operating on biodiesel, compressed natural gas (CNG), and propane.

The City of Chula Vista has adopted goals to reduce GHG emissions and increase the use of clean alternative fuels in its fleet.

The City has included the vehicle fleet in its inventory of greenhouse gas (GHG) emissions, and through its Climate Action Plan, has set a goal to convert 100 percent of its fleet to alternative fuel or advanced technology vehicles. The City also has integrated alternative fuels into its requirements for contracted fleets. This Roadmap chapter offers tools and information that can help the City meet its climate action plan goals while maintaining efficient fleet operations. The City has already made significant efforts in greening its fleet, and this information is presented to provide specific recommendations for future vehicle replacement.

California Goals for Transportation Fuels

The State of California has adopted several transportation fuel laws and goals, and the California Energy Commission has been the responsible agency for the targets shown in the *California Goals for Transportation Fuels* table on the next page. In order to meet these goals, the state allocates grant funds through the AB 118 Program to help address barriers to the production and deployment of alternative fuels, vehicles, and infrastructure. Millions of dollars are available annually through 2015, for which the City and local businesses can apply. Additional information on funding opportunities is provided later in this section.

California Goals for Transportation Fuels	
Objective	**State Goals and Milestones**
Petroleum Reduction	Reduce petroleum fuel use to 15 percent below 2003 levels by 2020
Alternative Fuel Use	Increase alternative fuel use to 20 percent of on-road fuel demand by 2020 and 30 percent by 2030
In-State Biofuels Use	Increase biofuel use to one billon gasoline gallons equivalent (gge) by 2010, 1.6 billion gge by 2020, and two billion gge by 2050
In-State Biofuels Production	In-state production of 20 percent of biofuels used in California by 2010, 40 percent by 2020, 75 percent by 2050

Chula Vista's Fleet

Chula Vista's fleet supports the provision of essential public services, such as police and fire protection, street repairs, park maintenance, and wastewater operations. The City uses more than 300,000 gallons of gasoline and diesel per year and spends more than $1 million annually to keep the fleet fueled.

When replacing vehicles, City staff evaluates vehicle duty requirements and selects the most efficient vehicle that can do the job. The City also has a policy to convert 100 percent of its fleet to alternative fuel or advanced technology vehicles. In support of its Climate Action Plan goal, the City recently installed a new 12,000 gallon biodiesel tank at its Public Works Center to fuel the 125 diesel vehicles in the City fleet. Biodiesel offers major savings in GHG emissions and reduces the use of petroleum. Increased adoption of alternative fuels such as CNG and propane offers the chance to displace gasoline use, lower emissions, and reduce fueling expenditures in the long term. As more efficient and alternative fuel vehicles replace older, less efficient vehicles, the City should see reduced costs.

Online Fleet Planning Tools

The U.S. Department of Energy's Petroleum Reduction Planning Tool (www.afdc.energy.gov/afdc/prep/), at the Alternative Fuels and Advanced Vehicles Data Center, could supplement Chula Vista's current fleet management system by evaluating and calculating petroleum reductions through three categories of reduction measures, including efficiency (e.g., fuel economy, idling reductions), conservation (e.g., VMT reductions), and alternative fuels (e.g., vehicles that run on electricity, CNG). A petroleum reduction goal (e.g., 10 percent savings) can be set and the free, online tool can identify potential savings based on the fleet information entered and petroleum reduction measures selected.

When considering a new fleet vehicle purchase, the Cool Fleets Web site (www.coolfleets.com) has a free, online calculator that can help the City identify the most cost-effective vehicle with the best environmental performance. It provides helpful information on a variety of indicators, including costs and GHG emissions. The user can compare each vehicle to itself or other models using different variables, such as the lease term and average annual mileage scenarios. The user chooses the applicable fuel cost for their location and selects vehicles individually or by category.

Chula Vista also can reduce fuel use by encouraging employees to use fleet vehicles efficiently. This includes trip planning, efficient driving habits, and routine maintenance. Specific tips are described in **Appendix B**. Chula Vista also could encourage City employees to utilize public transit or bicycles for work trips when practical.

Alternative Fuels for Fleet Applications

Alternative fuel and vehicle selection may depend on several factors, including:

- Vehicle cost
- Availability and proximity of refueling infrastructure
- Availability of grants and tax credits
- Whether new purchase or retrofit/conversion is being considered
- Vehicle maintenance

Descriptions of each type of alternative fuel and information on the availability of alternative fuel vehicles for a variety of fleet applications are provided in **Appendix B.** Opportunities for cost-saving vehicle replacements specific to Chula Vista fleet are described below.

Vehicle Replacement: Alternative Fuel Options for Chula Vista

Hybrid and alternative fuel vehicles could offer annual savings of $1000 to $4,000 per vehicle based on usage seen in Chula Vista.

SANDAG partnered with the California Center for Sustainable Energy (CCSE) and San Diego Regional Clean Cities Coalition to provide an alternative fuels assessment tailored to Chula Vista's fleet and vehicle replacement protocols. Chula Vista evaluates vehicles for replacement based on a number of factors, including age, mileage, maintenance history, and condition. Due to budget considerations, the City has delayed the replacement of fleet vehicles except those covered by special funds. As vehicles reach the end of their usable life, the City will need to identify funding for vehicle replacements. Alternative fuel vehicles generally cost more than conventional vehicles. However, the City could achieve sustained, long-term savings in fuel expenditures by purchasing alternative fuel

vehicles. The City has recently replaced or retrofitted many of its heavy duty diesel vehicles to meet California Air Resources Board (CARB) requirements.

The *Potential Vehicle Replacements and Savings* table on the next page identifies alternative fuel replacement options that could be suitable for the pick-up and work trucks, vans, and passenger vehicles in Chula Vista's vehicle fleet. The table identifies potential fuel and cost savings on an annual basis using mileage information provided by the City. Payback is calculated using the incremental cost of the vehicle after rebates compared to annual fuel savings. CCSE identified vehicles based on high annual mileage and fuel consumption. Emergency response vehicles and construction equipment were not included in this assessment, but your Energy Roadmap coordinator can provide additional information regarding these vehicles on request. While motorcycles were not evaluated in this analysis, rebates are available for battery electric motorcycles, as described in the CVRP table on page 12. Additional Information on lawn equipment and motorcycles is included in **Appendix C,** at the City's request.

Potential Vehicle Replacements and Savings

Vehicle	Fuel Tech[1]	Annual Mileage	Gallons Fuel Reduced/ Displaced[2]	Estimated Annual Savings	Years to Payback	MTCO2e per Year
Sedan	Hybrid	10,000	263	$1,075	5.1	2.3
Small SUV	Hybrid	9,000	163	$680	9.6	1.4
Mid SUV	Hybrid	7,800	231	$938	9.1	2.0
Sedan	CNG	8,000	381	$1,316	2.9	1.5
Van	CNG	6,000	500	$1,490	4.0	0.8
1/2T Truck	CNG	9,000	692	$2,078	5.2	1.1
3/4T Truck	CNG	7,000	636	$1,880	3.1	1.0
1T Truck	CNG	6,500	722	$2,094	2.8	1.0
MD Truck	CNG	-	900	$2,270	3.9	0.8
Medium HD	CNG	-	1400	$3,670	1.4	1.2
Heavy HD	CNG	-	1800	$4,789	4.2	1.5
Van	LPG	6,000	500	$786	6.1	0.6
1/2T Truck	LPG	9,000	692	$1,111	4.3	0.8
3/4T Truck	LPG	7,000	636	$977	4.9	0.7
1T Truck	LPG	6,500	722	$1,046	4.6	0.7
MD Truck	LPG	-	900	$1,202	4.0	0.5

Note:
1. Hybrid = hybrid electric vehicle, CNG = compressed natural gas, LPG= liquefied petroleum gas (propane)
2. Reducing/displacing the use of petroleum-based fuels is a goal of state policy and the federal Energy Policy Act and Energy Independence and Security Act.

Source: California Center for Sustainable Energy.

The vehicle replacement analysis uses current fuel prices, mileage, and fuel consumption of Chula Vista's vehicles, details of which are provided in **Appendix C**. In general, the replacement of older sedans with suitable hybrids results in an estimated annual savings of $750 to $1,300 per vehicle, per year. Higher-mileage vehicles may see payback periods of five years or less. The City has already integrated many hybrid vehicles into its fleet and should continue to do so in all suitable applications. Additional models of hybrids and plug-in hybrids are expected in future years.

Compressed Natural Gas and Propane Vehicles

Replacements of vans, pick-ups and work trucks with CNG or propane fueled versions could result in savings as well. CNG vehicles show higher savings due to the very low cost of natural gas fuel, with savings from $1,100-$2,200 per vehicle in light duty applications. Propane vehicles show savings of $700-$1,200 in the same applications and should be considered to provide diversity in fueling. Propane vehicles may offer tank options better suited to certain vehicle applications. CNG is the only option for heavier duty applications and shows savings of $2,200-$4,700 annually in these high fuel use applications. With available incentives, payback can be seen less than three years for some models and less than five for almost all models.

CNG and propane vehicles can cost between $8,000 and $20,000 more than their gasoline- or diesel-fueled counterparts and could require additional fueling infrastructure. The substantial fuel savings that would be achieved from large trucks, some of the biggest consumers of fuel, could offset the higher purchase costs within a few years when combined with available incentives. Many of the trucks in Chula Vista's fleet have lower annual mileage, and would not offer as quick of a payback. **Appendix C** shows paybacks for lower-mileage vehicles.

Greenhouse Gas Savings

Each gallon of gasoline used emits 0.009 metric tons of carbon dioxide equivalent ($MTCO_2e$). Based on the CCSE assessment, hybrid vehicles show the greatest GHG savings, with reductions of 1.6 to 2.8 $MTCO_2e$ per year. Propane and CNG vehicles show annual savings of 0.5 to 1.5 $MTCO_2e$. With the existing use of biodiesel, the City is already making major strides to reduce its GHG emissions. The adoption of CNG vehicles also would allow future adoption of renewable natural gas (biomethane). Plug-in electric vehicles offer major GHG savings and low operating costs, but at a high initial purchase price. The full alternative fuel analysis performed by CCSE is included as **Appendix C**.

Chula Vista should carefully evaluate all fuel types and available incentives when vehicle replacement decisions are made. California offers rebates and incentives for alternative fuel vehicles and infrastructure; currently available rebates are outlined later in this chapter.

Alternative Fuel Availability in Chula Vista

The City currently has on-site fueling for gasoline, biodiesel, CNG, and propane. Other available refueling sites near Chula Vista are identified in the following *Summary of Alternative Fuel Infrastructure Availability* table. **Appendix B** contains details on each location and the costs of installing each type of fueling infrastructure.

Summary of Alternative Fuel Infrastructure Availability

Fuel	Existing Fueling Sites within Six Miles of Chula Vista's Public Works Center[1]	Availability of Production-Distribution Infrastructure
Electricity	The EV Project is deploying up to 1000 level 2 electric vehicle chargers across San Diego County through 2012. Eight public charging stations are currently operational in Chula Vista. More subsidized charger projects are coming to the region.	Existing electricity grid and distributed energy sources.
Biodiesel	B20 Is delivered directly to the City.	Storage and blending terminals, port off-loading sites needed. Local producer is New Leaf Biofuel.
CNG	Onsite station. One additional public and two private stations in the City.	Existing natural gas pipeline network.
Propane (LPG)	Onsite fueling. Additional public fueling in the City.	Existing distribution by multiple vendors.
E85	One public station is located in the City.	Storage and distribution facilities needed in order to scale-up consumption.
LNG	One public station is located near the City.	Existing, but West Coast off-shore LNG terminals needed.
Hydrogen	No fueling sites in or near the City. The City previously operated a hydrogen fueling station.	Significant investment required.

Source: http://afdc.energy.gov/afdc/locator/stations/.

Notes:

1. Site names, addresses, and distances are provided in **Appendix B**.
2. Contact your Energy Roadmap coordinator for information regarding the installation of publicly available EVSE at City government sites.

With biodiesel, CNG, and propane readily available at the Public Works Center as well as elsewhere in the community, Chula Vista has the refueling infrastructure necessary for additional vehicles using these fuels. If the City chooses to substantially increase the number of alternative fuel vehicles, upgrades to the propane and CNG fueling systems may be necessary. The City has reached out to electric vehicle charger suppliers, including the EV Project, to obtain EV chargers for public and fleet use. Prior to purchase of any plug-in electric vehicles for the fleet, Chula Vista would need local access to EV chargers.

State Grants and Rebates

The California Energy Commission (CEC) and CARB offer alternative transportation grants and rebates through 2015 under the AB 118 Program. Funding is allocated annually and the FY 2011-2012 budget for the CEC AB 118 Program (www.energy.ca.gov/altfuels/) is about $100 million. CARB manages about $85 million in rebates and projects through the Air Quality Improvement Program (www.arb.ca.gov/msprog/aqip/aqip.htm).

The CEC has allocated funding for light-, medium-, and heavy-duty vehicles that use natural gas ($6.5 million), as well as light- and medium-duty vehicles that use propane ($5.2 million). Incentives amounts are displayed below in the table *CEC Gaseous Vehicle Buydown Incentives*. Expanding alternative fuel infrastructure is another funding priority for the energy commission

CEC Gaseous Vehicle Buydown Incentives

Gross Vehicle Weight in Pounds (lbs.)	Natural Gas	Propane
Up to 8,500	$3,000	$3,000
8,501 – 14,000	$8,000	$6,000
14,001 – 26,000	$20,000	$10,000
26,001 & greater	$26,000 [1]	NA
	$32,000[2]	NA

Notes:
1. With fuel tank capacity less than 190 Diesel Gallon Equivalent (DGE).
2. With fuel tank capacity of at least 190 Diesel Gallon Equivalent (DGE).

CCSE manages ARB's Clean Vehicle Rebate Project (CVRP) (www.energycenter.org/cvrp), which provides rebates of up to $2,500 for light duty battery electric and plug-in hybrid vehicle purchases. CCSE received $18 million in funding for FY 2012-2013. The *CVRP Rebate Amounts for Light-Duty Vehicles* table summarizes the rebates available.

CVRP Rebate Amounts for Light-Duty Vehicles

Vehicle Class	Maximum Incentive
Light duty zero emission vehicles (ZEV)	$ 2,500
Plug-in hybrid electric vehicles (PHEV)	$ 1,500
Zero emission motorcycles (ZEM)	$ 900
Neighborhood electric vehicles (NEV)	$ 900

Note: Eligible vehicles and associated rebate amounts are subject to change. Visit the CVRP Program Web site for eligible vehicle models and associated rebates.

Rebates for commercial vehicles, including trucks and buses, are available through ARB's Hybrid Truck and Bus Voucher Incentive Project (HVIP) (www.californiahvip.org). As of August 2012, the HVIP estimated fund balance was over $20 million. A summary of the

incentives available is provided in the *ARB HVIP Voucher Amounts for Trucks and Buses* tables below.

HVIP Voucher Amounts for *Zero-Emissions* Trucks & Busses	
Gross Vehicle Weight (in pounds)	
5,001 – 8,500 lbs	$12,000
8,501 – 10,000 lbs	$18,000
10,001 – 14,000 lbs	$30,000
14,001 – 19,500 lbs	$35,000
19,501 – 26,000 lbs	$40,000
> 26,000 lbs	$45,000

HVIP Voucher Amounts for *Hybrid* Trucks & Busses	
Gross Vehicle Weight (in pounds)	
6,001 – 8,500 lbs (plug-in hybrids only)	$8,000
8,500 – 10,000 lbs (plug-in hybrids only)	$10,000
10,001 – 19,500 lbs	$15,000
19,501 – 33,000 lbs	$20,000
33,001 – 38,000 lbs	$25,000
> 38,000 lbs	$30,000

Note: The **first three vouchers** redeemed by a fleet are eligible for the following additional voucher amount:
$2,000 per vehicle if below 8,500 lbs.;
$5,000 per vehicle if 8,501 to 10,000 lbs.;
$10,000 per vehicle if over 10,000 lbs.

The Electric Vehicle Project

The San Diego region was selected to take part in the largest EV rollout in U.S. history, through the EV Project (www.theevproject.com). The national project targets 16 major population areas in the U.S. as first markets for EVs. As such, the project includes deployment of nearly 15,000 EV chargers to create robust charging networks for EV drivers to utilize. Half of the EV Project funding (over $100 million) comes from a competitive ARRA grant awarded to Ecotality North America, an EV charger manufacturer. Nissan North America, General Motors/Chevrolet, and the

U.S. Department of Energy are national project partners. SANDAG and SDG&E are local project partners providing in-kind assistance.

Publicly accessible EVSE have been installed at a number of sites in the City, including the Otay Ranch Town Center and the Chula Vista Center. Many public sites throughout the region have been identified as potential locations for EV charging stations, including marinas, restaurants, community and regional shopping centers, large venue entertainment centers, transportation corridors, schools, hotels, airports, convenience retail, and retail shopping.

Through the EV Project, up to 1,000 electric vehicle (EV) public chargers can be installed around San Diego County by the end of 2012.

Over the next five years, most major automobile manufacturers are expected to introduce plug-in electric vehicles. In December 2010, two major automobile manufacturers began selling EV sedans, the Nissan Leaf and Chevrolet Volt, in San Diego County. Additional plug-in vehicles are currently available from Ford, Mitsubishi, Toyota, and other manufacturers. All vehicles will be compatible with the standardized EV chargers installed through the EV Project.

The City of Chula Vista and many other public agencies are participating in the Regional Electric Vehicle Infrastructure Working Group (REVI). Several of the major suppliers of EV chargers also participate in the REVI, which SANDAG established through a CEC AB 118 grant. Building on previous PEV planning efforts, REVI serves as a coordinating body that can help streamline and address barriers to EV adoption as well as provide best practices and real-time learning across jurisdictions. Through its involvement with REVI, the City can stay up-to-date on EV infrastructure needs for fleets and consumers.

Car2Go Carsharing as an Alternative to Vehicle Purchases

Car2Go in San Diego is a carsharing system utilizing a fleet of all electric, zero emission Smart cars. Car2Go is a subsidiary of Daimler and the San Diego region is the only region in the United States with an all-electric vehicle fleet, which launched in November 2011.

In contrast to other carsharing programs, Car2Go is free floating, meaning there is no return time or specific return location. Members simply walk up to a clearly marked Car2Go and swipe their remote access key. Upon arriving at their destination, the member can continue their rental or leave it in a parking spot and their responsibilities are complete. As of the writing of this document, Car2Go's service area was primarily central San Diego, but expanding to locations including Chula Vista is under

consideration. Currently, there are 300 vehicles available for use, which would increase as the service area increases.

Car2Go offers corporate memberships for organizations. Contingent on its expansion to Chula Vista, City employees could utilize Car2Go cars to drive short distances for meetings and events, allowing for other employees to utilize the conventional vehicle fleet for more distant locations.

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Promote Commuter Benefits to City Employees

The City of Chula Vista can achieve transportation-related energy savings by building on the Commuter Benefit Program it offers to employees. Such programs provide alternative transportation options to driving alone – and incentives to use them. As part of the Energy Roadmap Program, Chula Vista has been offered free assistance and tools to design and implement a customized commuter benefit program, also known as a Transportation Demand Management (TDM) Program. **Appendix D** contains additional Employee Commute Benefit Resources.

How it Works

A Commuter Benefit Program provides employees with alternative transportation options for their commute, as well as incentives for using them. It starts by bundling various commuting-related programs that meet the needs of your City and employees, and including them in the benefits package for City employees.

A Commuter Benefit Program stands side-by-side with your agency's health benefits, helping to attract and retain talented staff as well as improve overall employee satisfaction. A custom program could include everything from helping connect employees who want to carpool or vanpool with one another, to offering flexible work schedules and telework options, to providing free or reduced-cost transit passes.

Commuter Program Benefits

By providing alternative transportation choices for its employees, Chula Vista can:

- Improve traffic flow
- Set an example for residents and businesses
- Reduce commuter-related expenses
- Reduce oil consumption
- Help employees save time and reduce stress
- Reduce air pollution and greenhouse gas emissions

Some of the programs are offered free by SANDAG. Others are inexpensive for the City to implement or come with subsidies sponsored by SANDAG. For example, SANDAG provides a $400 per month subsidy for qualifying vanpools. The Commuter Benefit Starter Kit for Employers, available through iCommute, provides your agency with the tools to get started, including an overview of your options, sample policies, promotional materials, and tax benefit information.

The iCommute online system offers employees free and convenient ride matching and trip tracking tools. The site also allows your agency to create customized incentive programs for rideshare participants. The system's convenient reporting feature details how many of your employees are participating and measures the agency's and employees' financial and environmental savings, including the amount of air pollution and greenhouse gas emissions avoided, cost savings, and fuel savings.

City Employee Commute Trends

iCommute will be conducting a survey of City employees to examine how employees currently commute to work and determine what alternative modes of transportation they are most interested in taking. It also will examine what motivates them to take one mode of transportation over another. This is the first step in establishing a Commuter Benefit Program geared specifically for the City. Survey results should be available in late 2012.

Specific Commuter Programs

The programs, tools, and ideas below have been highlighted to illustrate how Chula Vista can reduce transportation-energy consumption and costs. A more complete list of programs, tools, and ideas will be available once the employee survey is complete.

Pretax Incentive

Employers can take advantage of employee and employer payroll tax savings offered through the IRS Commuter Fringe Benefit Program (IRS Section 132). The IRS allows employers to offer employees the opportunity to set aside a portion of their salary, pretax, to pay for transit and vanpooling, up to $125 per month, per employee (in 2012). Bicyclist also can receive up to $20 per month (cannot be combined with the transit incentive). Employers benefit by not paying payroll taxes on that money, while in effect adding value to their employee's compensation package. To take full advantage of this option, please discuss it with your tax analyst.

The IRS Commuter Fringe Benefit Program is a free incentive that Chula Vista can offer its employees.

TripTracker

TripTracker is an easy and convenient way for a commuter to track trips made by alternative modes of transportation. It also keeps track of gallons of fuel saved, monetary savings, pounds of carbon dioxide not emitted into the atmosphere, and how many miles a commuter has not traveled alone. It is necessary for commuters to track

their trips if they would like to be enrolled in a Guaranteed Ride Home Program that SANDAG sponsors. Tracking trips also enters the commuter into iCommute's monthly prize drawings. Also through TripTracker, the City can implement its own incentive program to encourage alternative modes of transportation.

RideMatcher

The City of Chula Vista can reduce petroleum consumption and congestion by encouraging carpools and vanpools. The City has already set up a network through iCommute's RideMatcher system. Employees can use RideMatcher to find other employees who commute from the same area and have similar work hours. RideMatcher assists employees in finding a carpool, vanpool, or BikeBuddy.

Transit

The Blue Line Trolley and several MTS routes service the City of Chula Vista. The Civic Center area is served by four bus routes that have stops within two tenths of a mile from City Hall. They are: Route 701 (H Street Trolley to Palomar Street Trolley), Route 704 (Bayfront/E Street Trolley to Palomar Street Trolley), Route 705 (Southwestern College to Bayfront/E Street Trolley), and Route 929 (Downtown San Diego to Iris Trolley). To encourage use of the public transit, the City could offer discounted/subsidized passes.

Bike Lockers

There are currently 16 bike lockers located at the H Street Trolley Station. These lockers require an electronic card to access the lockers and are offered on a first come first serve basis. The City could encourage biking to work by having bicycle lockers at the various City facilities. City staff is currently working with SANDAG to relocate bike lockers to City facilities from Trolley stations undergoing renovations. Lockers should be available in spring 2013.

Lunch Time Lessons

iCommute partners with several bicycle organizations that offer no cost to low cost bike safety courses and promote cycling as an alternative mode of transportation. These safety courses are offered throughout the year at the City's convenience. Chula Vista has organized lunch time lessons in the past and should continue to do so.

Telework

By allowing employees to work from home, the City of Chula Vista lessens the burden on transportation facilities, reduces energy consumption, and decreases congestion. To further improve the effectiveness of the City's telework policy, Chula Vista could participate in the iCommute-sponsored Telework pilot program beginning in spring 2013. At the end of the pilot program, the City would determine if teleworking is a viable option for more City employees. Teleworking has been shown to help recruit and retain high-performing employees and help the employees become more productive and happier. The employee also benefits by not having to commute to work, which puts money back into the employee's pocket. Jobs that are most suited for teleworking are ones that require reading, writing, researching, working with data, and talking on the phone or "information-based jobs."

Alternative Work Schedule

The City of Chula Vista has a formal policy that offers employees the option of working an alternative work schedule. The alternative schedule typically involves working 80 hours over the course of 9 days, or a 9/80 schedule, resulting in 1 day off every 2 weeks. Not having to commute to the office once every other week eliminates a trip, which reduces emissions and saves on fuel use and associated costs.

Guaranteed Ride Home

In order to make alternative modes of transport a more feasible option, iCommute offers the Guaranteed Ride Home Program. Enrollment in this program allows commuters who carpool, vanpool, take a Premium Express Bus, the COASTER, walk, or bike to work three or more times per week to have the use of a rental car or taxi in the case of a family emergency, unscheduled overtime, or if the commuter's rideshare partner becomes unavailable. A copay of $3.00 is required when the commuter requests the use of this program and may be used up to three times per year. A study is currently underway to determine if this program should be opened to all modes of alternative transportation.

SchoolPool

SchoolPool is open to all public and private elementary schools, middle schools, and high schools in the San Diego region. SchoolPool promotes carpooling, biking, and walking to school. These alternative modes of transportation reduce congestion around schools and promote healthy lifestyles while helping the environment. SchoolPool emphasizes safety; safety events are held at various schools throughout the year. For the 2012-2013 school years, there are two local schools enrolled in the SchoolPool Program. The City of Chula Vista could encourage all of its schools to enroll in the program.

Getting Started

At the request of City staff, SANDAG staff made an overview presentation on the iCommute Program to Brendan Reed, Pedro Garcia, and Teri Enos-Guerrero at the City on July 17, 2012. The iCommute team has since begun working with municipal staff to learn more about Chula Vista's existing commuter benefits and discuss potential ways to enhance the City's existing commuter policies through the iCommute Program. Implementing a program is an easy and cost-effective way to reduce energy consumption at the City; many commuter policies and benefits can be offered at no cost or little cost to the City.

For more information on iCommute programs and services and to download the Commuter Benefit Starter Kit for Employers, visit www.icommutesd.com, or contact Kimberly Weinstein at (619) 699-0725 or Kimberly.Weinstein@sandag.org, or Alexander Lukes at (619) 515-1178 or Alexander.Lukes@sandag.org.

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3

Leverage Planning and Development Authority

Local governments have the opportunity to promote clean fuels and active transportation options in their communities by leveraging their authority over local planning and development activity. This chapter identifies ways that the City of Chula Vista can address clean transportation considerations in local planning, and recognizes current City efforts in this area. In addition, suggestions are offered that could help the City implement its active transportation policies and promote alternative fuel choices.

Active transportation choices like biking and walking are healthier alternatives to driving and reduce petroleum consumption and pollution locally. In addition, smart growth land use patterns, like those characterized in the City's General Plan, accommodate biking and walking as mobility choices. Smart growth developments typically contain a diverse mix of land uses, complemented by sidewalks, bike paths, a variety of housing types, and an interconnected and rich street grid that can slow and disperse vehicle traffic. Chula Vista also has recognized smart growth development as a climate mitigation measure in the City's Climate Action Plan.

Chula Vista Climate Action Plan, Mitigation Measure #6

The City will continue to implement the "Smart Growth" design principles, which promote mixed-use and walkable and transit-friendly development, particularly in and around the E, H, and Palomar Street Trolley stations.

Sustainable Communities Strategy

Pursuant to Senate Bill 375 (Steinberg 2008), SANDAG and regional planning agencies across the state are required to develop a Sustainable Communities Strategy (SCS) in order to reduce greenhouse gas (GHG) emissions from passenger vehicles consistent with targets set by the California Air Resources Board (CARB). The following table, *GHG Reductions in the SANDAG Sustainable Communities Strategy*, presents the assigned

CARB targets and the projected GHG reductions and vehicle miles traveled (VMT) reductions outlined in the SCS. On October 28, 2011, SANDAG became the first metropolitan planning organization (MPO) in the state to adopt an SCS as part of its 2050 Regional Transportation Plan (RTP). SANDAG is using this strategy as the foundation for updating its Regional Comprehensive Plan (RCP), which provides a long-term strategic planning framework for the region based on "smart growth" and "sustainability."

GHG Reductions in the SANDAG Sustainable Communities Strategy

Average Weekday Per Capita CO_2 and VMT Reductions for Cars and Light Trucks from 2005

Target Year	CARB Target	GHG	VMT
2020	7%	14%	12%
2035	13%	13%	10%
2050	N/A	10%	7%

Notes: CO_2 = carbon dioxide.
CARB identifies CO_2 as the GHG whose concentration is being most affected directly by human activities. CO_2 also serves as the reference to compare all other GHGs.

SB 375 also provides an opportunity for streamlining the California Environmental Quality Act (CEQA) process for certain local redevelopment projects if a project is consistent with the SCS as either a "residential/mixed use project" or as a "Transit Priority Project" (TPP). Environmental review of a residential/mixed use project consistent with the SCS would not need to consider growth-inducing impacts or increases in GHG emissions from passenger cars and light trucks. For a TPP, the project would need to be at least 50 percent residential, with a density of at least 20 units per acre and be within a half mile of a major transit stop or a high-quality transit corridor included in the 2050 RTP.

SANDAG, working closely with all local jurisdictions, will undertake an update to its RCP, RTP, and SCS during 2012-2015, including a review of smart growth designated areas in relation to the SCS. **Appendix E** contains larger definitions for what could qualify for CEQA streamlining.

Smart Growth Development Policies

Smart growth can be defined as a compact, efficient, and environmentally sensitive pattern of development that provides people with additional travel, housing, and employment choices by focusing future growth away from rural areas and closer to existing and planned job centers and public facilities, while preserving open space and natural resources. Smart growth policies fit into the broader context of sustainability by guiding development to preserve existing access to resources for future generations.

The principles of sustainability are based on achieving conservation goals and objectives in three broad areas: a prosperous economy, a healthy environment, and social equity. The City of Chula Vista already has undertaken planning efforts that serve to implement Smart Growth principles, such as the village concept for Otay Ranch. Smart Growth principles are incorporated into Chula Vista's General Plan Vision and Themes, which guide the Land Use Plan and provide the basis for many of the Land Use and Transportation Element's policies, including the Area Plans.

Past planning of the built environment typically featured segregation of land uses and transportation systems that favored the automobile over biking, walking, and public transit. Communities in which people walk, bike, and ride public transit are typically characterized by a more concentrated, diverse, and synergistic mix of land uses and a distinct sense of place, created by safe, generous and attractive sidewalks, well-defined and well-connected bike paths and lanes, street-adjacent buildings that accommodate pedestrian-oriented uses, a variety of housing types and choices, and a rich, interconnected street grid that controls the speed and volume of vehicle traffic. In addition to promoting transportation choices, smart growth land use patterns help protect open space, wildlife habitat, watersheds, and agricultural land.

Chula Vista has been integrating smart growth principles into local plans for several areas. Some examples are the Urban Core, including downtown Chula Vista, the Palomar Gateway District, and Otay Ranch. These sites are included in the regionwide Smart Growth Concept Map, which underwent a technical update in January 2012 in preparation of the RCP update.

1. **Urban Core** is an area in Northwest Chula Vista, including downtown, that is addressed in the adopted Urban Core Specific Plan (UCSP) that builds on the framework of Chula Vista's updated General Plan. The area encompasses two existing Trolley stations and several existing bus routes, a planned H Street Corridor Rapid Bus transit route, and a future shuttle route connecting key activity centers in the Urban Core and linking the Chula Vista Bayfront.
2. **Palomar Gateway District** is the major southern gateway to the City of Chula Vista. The area currently includes light industrial businesses and multi-family housing north of Palomar Street and a mix of single- and multi-family housing south of Palomar Street. Mixed-use transit is planned for the area around the Palomar

Trolley Station, with a mix of shops, office, and multi-family housing in low- and mid-rise buildings.

3. **Otay Ranch** is the largest master planned-community in eastern Chula Vista. Otay Ranch is home to several sites in the Smart Growth Concept Map. These include the eastern urban center, the Otay Ranch village town centers and community centers, and the University Village town center. Otay Ranch is a balanced community with commercial and residential uses as well as open space and a series of connected trails and paseos to promote walking throughout.

A list of sample policies and resources that reduce petroleum consumption, support alternative fuels, and/or support smart growth planning is provided as **Appendix E**.

Existing City Plans and Programs

Climate Action Plan

The City of Chula Vista has used planning to address climate change since 2000, when the City adopted a Carbon Dioxide (CO2) Reduction Plan and set a goal to reduce emissions 20 percent below 1990 emissions. In 2008, the original plan was revised to include seven new climate mitigation measures, and in 2011, eleven climate adaptation strategies were adopted. The mitigation measures include improving energy and water efficiency, increasing the use of renewable energy, utilizing more fuel efficient and alternative fuel vehicles, and designing transit-friendly and walkable communities. A list of the Climate Action Plan mitigation and adaption measures is included in **Appendix A**. Staff proactively seeks funding and leverages partnerships in order to implement these 18 climate measures. The City Council receives an update every six months on the implementation progress.

Bikeway Master Plan

The City's 2011 Bikeway Master Plan recommends an additional 51 miles of bicycle facilities to be integrated with the existing 113 miles of bicycle facilities within the City. The goal of the update to the 2005 Bikeway Master Plan was to complete facilities so that cyclists can expect more consistent, and therefore safer, conditions. The 2011 plan also recommends more programs and policies related to education, encouragement, enforcement, evaluation, and planning.

To meet the goals of its bike plan and implement bike and pedestrian network improvement projects, the City

can apply for funds through the *TransNet* Smart Growth Incentive Program (SGIP) and the Transportation Development Act (TDA) *TransNet* Bicycle and Pedestrian grant programs, described below.

Bike Chula Vista and Safe Routes to Schools

The City of Chula Vista has developed a Bike Chula Vista map and guide for residents to learn about local bicycling resources. The map highlights all of the bike routes and bike lanes throughout the City. Additionally, the City recently implemented a project to evaluate local middle school street and sidewalk infrastructure for connectivity and coverage and to identify on-the-ground infrastructure deficiencies through school route field audits. Based on the results, the City created suggested school route maps for pedestrians and bicyclists, mainly focusing on a one-mile radius around Chula Vista middle schools.

The Bike Chula Vista and Safe Routes to Schools maps are available on the Chula Vista Conservation Web site at:
http://www.chulavistaca.gov/clean/conservation/climate/alternative.asp .

Funding for Smart Growth Planning

SANDAG manages the *TransNet* Smart Growth Incentive Program (SGIP), which funds transportation and transportation-related infrastructure improvements and planning efforts that support smart growth development. The SGIP awards 2 percent of the annual *TransNet* revenues to local governments through a competitive grant program. For more information on the SGIP and upcoming funding cycles, visit:
www.sandag.org/smartgrowth.

SANDAG allocates funds under the TDA and *TransNet* local sales tax program to support bicycle and pedestrian transportation projects through a competitive process on an annual basis. For FY 2010, approximately $7.7 million was available. During the FY 2009-2010 funding cycle, Chula Vista was awarded two capital grants and one planning grant for bicycle and pedestrian improvements, streetscape improvements, and the Palomar Gateway District Specific Plan and Environmental Impact Report.

As the City continues to undertake planning activities and evaluate goals and policies related to smart growth, active transportation, and alternative fuels, it can utilize the menu of sample policy measures provided in **Appendix E** as an additional reference. The measures reflect the goals of State agencies like the California Energy Commission and Office of the Attorney General. This appendix also contains the existing and potential "smart growth opportunity areas" that the City provided SANDAG for inclusion in the update to the Smart Growth Concept Map.

Clean and Efficient Transportation Options

Transportation Demand Management Measures

Transportation demand management (TDM) is the application of strategies to reduce single-occupancy vehicle travel by encouraging alternative transportation options. Including TDM measures in the development review process may offer developers creative, affordable, and effective ways to reduce vehicle trips and their impacts. TDM measures also contribute toward Leadership in Energy and Environmental Design (LEED) certification. The SANDAG iCommute Program offers free assistance to San Diego regional businesses and agencies in establishing and implementing customized TDM policies and programs that reduce traffic congestion, fuel use, air pollution, and greenhouse gas emissions. SANDAG recently completed a study, *Integrating Transportation Demand Management into the Planning and Development Process - A Reference for Cities.* The report is available as part of the Smart Growth Toolbox at the following link:
http://www.sandag.org/uploads/publicationid/publicationid_1663_14425.pdf.

Sample mandatory and voluntary ordinances for including TDM measures in new development projects are provided in **Appendix F**.

Parking Management

Parking management, reform, and pricing strategies are options to reduce the amount of driving and are primarily implemented at the local government level. Parking strategies can be effective in, and complement, smart growth areas with compact land use patterns and alternative travel options. Parking policies complement many TDM efforts, and normally have included incentives or disincentives for fewer spaces per unit of development (parking maximums rather than minimums), encourage shared parking among land uses (retail and office, for example), and/or a fee per parking space.

Parking strategies are presented in the TDM study referenced above, and sample measures are included in **Appendix F**.

Planning for Alternative Fueling Infrastructure

One of the six early actions identified in the SANDAG Regional Energy Strategy is to support the planning for electric vehicle charging and alternative fueling infrastructure. Siting alternative fueling stations, electric charging points, vehicle maintenance facilities, and other infrastructure in coordination with vehicle availability is important to provide customers like fleet managers and the general public with a level of certainty that infrastructure will be available to support their investment in an alternative fuel vehicle.

Currently, Chula Vista is home to a number of alternative fueling stations, including the City's own biodiesel and CNG fueling; electric vehicle charging at two Macy's stores, two Walgreens stores, and a Kohl's store; ethanol fueling at Union 76 gas station, and propane fueling at Clean Energy in Otay Mesa and U-Haul.

Support for alternative fuel infrastructure also can help attract private investment associated with alternative transportation to the region. The San Diego Regional Clean Cities Coalition, along with its members, including the City of Chula Vista, the County of San Diego, SANDAG, other local cities, the Airport Authority, the Port of San Diego, and CCSE, have committed to addressing the need for more fueling choices across the region. A complete list of both publicly and privately available alternative fueling stations is included in **Appendix B**.

Plug-in Electric Vehicles and Charging Stations

The San Diego region is at the forefront of plug-in electric vehicle (PEV) deployment, with the highest per capita amount of PEV purchases and electric vehicle supply equipment (EVSE) installations in the United States. By the end of 2012, the EV Project will have installed up to 1,000 home (or fleet) Level 2 EVSE; 1,000 publicly accessible Level 2 EVSE at commercial properties, city streets, municipal buildings, and San Diego destinations like Balboa Park; and 30 DC fast charge EVSE along the region's transportation corridors. Chula Vista is helping to recruit residents and businesses interested in taking advantage of the incentives offered through the EV Project.

Several barriers have been identified through the region's early experiences with EV infrastructure, which need to be addressed in a strategic and coordinated manner to enable widespread regional PEV adoption and efficient deployment of EVSE. Assisted by a California Energy Commission grant, SANDAG and CCSE formed a working group of local governments, regional agencies, SDG&E, and other stakeholders to address these PEV issues. The San Diego Regional Electric Vehicle Infrastructure Working Group (San Diego REVI) held its kickoff meeting in March 2012 and is holding bimonthly meetings over a two-year period. Chula Vista staff has been participating in the working group as the South County Region representative.

Sample mandatory and voluntary ordinances for including TDM, alternative fueling infrastructure, and other transportation-related measures in development projects are provided in **Appendix F**.

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Market Programs and Rebates to Residents, Schools, and Local Businesses

This chapter provides a description of existing commuter, active transportation, and fuel-saving resources (with internet links) that the City could include on its municipal Web site, newsletters, and other community outreach. This would enable the City to serve as a conduit to its constituents on clean transportation programs and services. The City could help promote messages of sustainability that foster a greater local understanding of the connection between fuel use and environmental impacts.

The following five outreach mechanisms are possible ways that Chula Vista can engage its constituents. Your Energy Roadmap coordinator can suggest ways to implement any and all of these outreach mechanisms and information:

1. On the City internet site, post links to clean transportation programs as well as the other resources provided here.
2. Through City newsletters or other outreach mechanisms, include articles about opportunities to save energy with links to existing programs and community resources, like the California Center for Sustainable Energy (CCSE).
3. At City venues, such as the permit desk, parks and recreation areas, and libraries, provide educational materials on saving energy. SDG&E, CCSE, and SANDAG iCommute have materials about clean transportation programs and services available to residents and businesses in the region.
4. At community events, SDG&E, CCSE, and SANDAG iCommute can provide booths and/or information on clean transportation programs and commuter programs available to your constituents.
5. Through an introduction from the City, SANDAG iCommute can engage your local business organizations on low- and no-cost programs tailored to businesses.

SANDAG iCommute Programs for the Community

In addition to supporting City employee commuter programs like those identified in Chapter 2, the City could help educate its residents, schools, and local businesses about alternatives to driving alone in the community. The City could:

- Provide information on commuting resources, such as the 511 transit trip planner, iCommute online ridematching service, and an online cost-of-commute calculator.

- Continue to participate in annual events and campaigns that encourage commute alternatives to driving alone, such as Bike to Work Day, Dump the Pump, Rideshare Week, and Walk and Bike to School Day:
  - Adopt proclamations and celebrate these events in your community. Samples are provided in **Appendix F.**
  - Participate in the Bike to Work and Rideshare Week Corporate Challenges to demonstrate your commitment to sustainable commute choices.
  - Host a Bike to Work Day pit stop.
- Recognize and honor local commuters and employers who have demonstrated a commitment to sustainable commute choices.

Biking and walking promote healthy living, in addition to reducing fuel use.

SANDAG SchoolPool Program

SchoolPool is iCommute's free ridematching service for parents of children who attend the same school anywhere in the region. With this safe and secure service, parents are matched with other parents in their neighborhood who are interested in sharing the driving responsibilities or would like to have their kids bike or walk to school with other students and a parent leader. The City could:

- Encourage the School Districts and/or individual schools to enroll in SchoolPool, a secure, online ridematching service administered by SANDAG for parents with children in kindergarten through 12th grade. SchoolPool can be a transportation solution for parents who live in districts where school bus services have been cut:
  - SchoolPool enables parents of children who attend the same school and live in the same neighborhood to share responsibilities of getting their children to and from school.
  - SchoolPool helps parents connect their children with bike buddies and "walking school buses" – groups that ride their bikes or walk to school together with one or more adults.
  - Parents who use SchoolPool to find bike buddies and walking school buses can receive a free helmet for each child who bikes and a free baseball cap for each child who walks. All children who either bike or walk can receive reflective backpacks. Safety vests are provided for parent leaders.

Through SchoolPool, parents can receive a free helmet for each child who bikes and a free baseball cap for each child who walks. All children who bike or walk can receive reflective backpacks, and safety vests are provided for parent leaders.

The San Diego Regional Clean Cities Coalition hosts workshops on petroleum reduction and alternative fuel options for our region.

It is supported by and implements the goals of the U.S. Department of Energy (DOE) Clean Cities Program. Clean Cities encourages energy efficiency in transportation, reduction of petroleum use, and conversion of vehicles to alternative fuels where economically practical. Members of the coalition support controlling fleet operating costs, improving air quality, and promoting innovative new technologies.

The California Center for Sustainable Energy (CCSE) is an independent nonprofit that helps residents, businesses, and public agencies save energy.

CCSE manages a variety of rebate, technical assistance, and education programs. It also provides the community with objective information, research, analysis, and long-term planning on energy issues and technologies.

Clean Transportation Web Sites

SANDAG iCommute	www.icommutesd.com/
San Diego Regional Clean Cities Coalition	www.sdcleanfuels.org/
Clean Vehicle Rebate Project	www.energycenter.org/cvrp
Hybrid Truck and Bus Voucher Incentive Project	www.californiahvip.org
SDG&E Clean Transportation	www.sdge.com/environment/cleanTransportation.shtml
The EV (Electric Vehicle) Project	www.theevproject.com/
Plug-in & Get Ready	www.energycenter.org/pluginready/

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Looking Forward

Through the SANDAG Energy Roadmap Program, the City of Chula Vista can set a framework for continued efforts to address clean transportation in local government operations and in the community. There are several funding opportunities for which the City may apply to continue petroleum reduction and alternative fuel activities. These local, state, and federal funding sources are described below, followed by non-financial resources that could be of service.

Clean Transportation Funding Opportunities

California Energy Commission AB 118: Alternative and Renewable Fuel and Vehicle Technology Program

The AB118: Alternative and Renewable Fuel and Vehicle Technology Program authorizes the California Energy Commission (CEC) to develop and deploy alternative and renewable fuels and advanced transportation technologies to help attain the state's climate change policies. CEC has an annual program budget of approximately $100 million to support projects that:

- Develop and improve alternative and renewable low-carbon fuels
- Optimize alternative and renewable fuels for existing and developing engine technologies
- Produce alternative and renewable low-carbon fuels in California
- Decrease, on a full fuel cycle basis, the overall impact and carbon footprint of alternative and renewable fuels and increase sustainability
- Expand fuel infrastructure, fueling stations, and equipment
- Improve light-, medium-, and heavy-duty vehicle technologies
- Retrofit medium- and heavy-duty on-road and non-road vehicle fleets
- Expand infrastructure connected with existing fleets, public transit, and transportation corridors
- Establish workforce training programs, conduct public education and promotion, and create technology centers

Additional information on AB 118 and the associate investment plan can be found on the CEC Web site (http://www.energy.ca.gov/altfuels/index.html).

Department of Energy Clean Cities Program

Clean Cities advances the nation's economic, environmental, and energy security by supporting local actions to reduce petroleum consumption in transportation. A national network of nearly 100 Clean Cities coalitions brings together stakeholders in the public and private sectors to deploy alternative and renewable fuels, idle-reduction measures, fuel economy improvements, and emerging transportation technologies. A variety of Clean Cities tools and resources are available on the U.S. Department of Energy (DOE) Web site (http://www1.eere.energy.gov/cleancities/). The local affiliate of the DOE Clean Cities Program is the San Diego Regional Clean Cities Coalition and is described on the following page.

Clean Vehicle Rebate Project

The Clean Vehicle Rebate Project (CVRP) is funded by the California Air Resources Board (CARB) and administered statewide by the California Center for Sustainable Energy (CCSE). A total of $45.2 million has been appropriated for FY 2009-2013 to promote the production and use of zero-emission vehicles (ZEV), including electric, plug-in hybrid electric, and fuel cell vehicles. Rebates of up to $2,500 per light-duty vehicle are available for individuals and business owners who purchase or lease new eligible zero-emission or plug-in hybrid electric vehicles.

State Energy Program Grants and Energy Efficiency and Conservation Block Grants

The U.S. Department of Energy (DOE) and California Energy Commission release State Energy Program (SEP) solicitations that support transportation, residential, commercial, agricultural, industrial, institutional energy efficiency, and renewable programs.

Both agencies also release Energy Efficiency and Conservation Block Grants (EECBG) solicitations. The EECBG provides local government grants to reduce fossil-fuel emissions, reduce total energy use, and improve energy efficiency and conservation in the transportation and building sectors. Grants originate from DOE and are released from both the Energy Commission and DOE. Review the Energy Commission's grants Web site (www.energy.ca.gov/contracts/index.html) for program opportunities.

TransNet: Smart Growth Incentive Program and Active Transportation Grants

The *TransNet* Smart Growth Incentive Program (SGIP) funds transportation-related infrastructure improvements and planning efforts that support smart growth development. The SGIP awards 2 percent of the annual *TransNet* revenues for the next 40 years to local governments through a competitive grant program to support projects that will help better coordinate transportation and land use in the San Diego region. Additional information on the current funding cycle is available at www.sandag.org/smartgrowth.

The goal of the Active Transportation Grant Program is to encourage local jurisdictions to plan and build facilities that promote multiple travel choices for residents and connectivity to transit, schools, retail centers, parks, work, and other community gathering places. The grant program also encourages local jurisdictions to provide bicycle parking, education, encouragement, and awareness programs that support pedestrian and bicycle infrastructure. More information on current funding opportunities is available at www.sandag.org/active.

Non-Financial Resources for Local Governments

San Diego Regional Clean Cities Coalition

The San Diego Regional Clean Cities Coalition is the local affiliate of the Department of Energy's Clean Cities Program. Coordinated by the California Center for Sustainable Energy (CCSE), the Clean Cities Coalition brings together stakeholders in the public and private sectors to increase the use of alternative fuel and alternative fuel vehicles. The Clean Cities Coalition holds educational events on a regular basis and board of directors meets monthly. More information and a calendar of events can be found at www.sdcleanfuels.org.

California Center for Sustainable Energy

The California Center for Sustainable Energy (CCSE) (www.energycenter.org) works with local governments on several transportation initiatives including:

- San Diego Regional Electric Vehicle Infrastructure Working Group (REVI), in partnership with SANDAG, that includes representatives from local jurisdictions, regional agencies, SDG&E, workforce training partners, and electric vehicle and equipment manufacturers
- San Diego Regional Clean Cities Coalition
- California Clean Vehicle Rebate Project

Energy Policy Initiatives Center

The Energy Policy Initiatives Center (EPIC) is a nonprofit academic and research center of the University of San Diego, School of Law that studies energy policy issues affecting the San Diego region and California. EPIC serves as a source of legal and policy expertise, and provides information on the development of sustainable solutions that meet the region's future energy needs. For more information, contact (619) 260-4589 or visit www.sandiego.edu/epic/.

San Diego Association of Governments

SANDAG Energy and Climate Planning Program staff is knowledgeable about federal, state, regional, and local issues and can be a resource for jurisdictions after their Energy Roadmaps are completed. For more information on SANDAG energy and climate planning, contact Susan Freedman at (619) 699-7387, Susan.Freedman@sandag.org or visit www.sandag.org/energy.

iCommute

The SANDAG iCommute team can assist local governments with staff commuter programs, transportation demand management (TDM) ordinances, online tools, and outreach to your constituents on mobility choices in the region. Contact Kimberly Weinstein at (619) 699-0725, Kimberly.Weinstein@sandag.org or visit www.icommutesd.com.

SANDAG