Welcome to the third issue of the U.S. Department of Energy's (DOE) Clean Cities Drive. Each issue of the newsletter will bring you valuable information from the Clean Cities program to help you succeed in putting more alternative fuel vehicles (AFVs) onto our roads. If you have a story to tell, a picture to share, or information of interest to Clean Cities participants, please call the Clean Cities Hotline at 1-800-CCITIES.

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Clean Cities Build Active Alternative Fuels Markets

The 38 officially designated Clean Cities programs—spanning 23 states and the District of Columbia—have sparked a growing market for alternative fuels.

"As the market for alternative fuels takes off, Clean Cities is a network for both local- and national-level marketing and education about alternative fuels," said Tommy Foltz, the U.S. Department of Energy's (DOE's) co-director for the Clean Cities Program. "In Clean Cities programs across the country, local-fuel-neutral coalitions are building markets for alternative fuels, vehicles, and refueling stations, and Clean Cities stakeholders are not only direct beneficiaries of these efforts, they are also catalysts to these efforts," added Foltz.

Following are a few examples of Clean City stakeholder successes that are detailed in this issue:

- Corn growers, stakeholders in seven Clean Cities, build markets for Ford and General Motors ethanol vehicles
- Louisville, Kentucky Clean City stakeholder IMW Atlas Industries, Inc. uses Clean Cities network to expand product markets
- ECOGAS Corporation, an Austin, Texas stakeholder, produces liquefied natural gas from landfill gas
- The U.S. Postal Service supports Clean Cities nationwide with substantial alternative fuel vehicle (AFV) fleets
- Ford and Chrysler introduce 1996 AFVs in Clean Cities
- Columbia Gas System, a stakeholder in two Clean Cities, builds network of clean corridors

For more information on these and other success stories, see "Stakeholders Benefit from Clean Cities" beginning on page 2, and "Clean Cities Keep Focus on Alternative Fuels" on page 6.


Hundreds of Clean Cities stakeholders are expected to meet in St. Louis, Missouri, for the 1995 National Clean Cities Stakeholders Meeting and Conference on September 10-13.

This meeting will give stakeholders a chance to participate in interactive workshops on a variety of issues: funding, marketing, communications, and fine-tuning your Clean Cities coalitions.

Hope to see you there!

For conference information, contact the Clean Cities Hotline at 1-800-CCITIES.
STAKEHOLDERS BENEFIT FROM CLEAN CITIES

CORN GROWERS EXPAND MARKET FOR ETHANOL

Building a mass market for alternative fuels is one way stakeholders can work with auto manufacturers to justify production of more alternative fuel vehicles (AFVs).

No one knows this better than the nation’s corn farmers and ethanol advocates, who for the past 5 years have strived to establish a market for ethanol-derived alcohol fuel starting in model year (MY) 1996. This is a significant step from an almost nonexistent E85 market just a few years ago. (E85 flexible fuel vehicles can run on up to 85% ethanol).

National and/or local corn growers organizations are involved as Clean Cities stakeholders in St. Louis, Chicago, Peoria, Milwaukee, Denver, Louisville, and Southwest Kansas. Corn grower organizations would like to see 250,000 E85 vehicles on the road by 2000.

The Clean Cities program has helped its stakeholders build awareness of E85 as a strong candidate for fleet use, according to Phil Lampert, director of the National Ethanol Vehicle Coalition. “Clean Cities has allowed fleets and other consumers to see more fuel options. It has helped us educate stakeholders on ethanol.”

In response to heavy educational and promotional activity among corn farmers, private companies, and federal and state governments, Ford Motor Company will manufacture 7,000 E85 and M85 (methanol) Taurus sedans in MY 1996. The exact type of vehicle will be determined by the market, according to a Ford spokesman.

More recently, General Motors (GM) announced that it will make all of its 1997 four-cylinder light-duty pickup trucks E85-capable. This is the largest single-model AFV production program of any manufacturer.

“The inclusion of ethanol capability in this program is a win/win for the environment and the customer,” said GM vice president Dennis R. Minano. “As a near-term alternative fuel, ethanol provides many positives. Ethanol is a renewable domestic energy source, provides more range than some other alternative fuels, and is good for the environment.”

Lampert said he expects MY 1996 E85 vehicle purchases will initially require 40 additional E85 refueling sites if they are to be refueled with the alternative fuel instead of gasoline. Funding for building this initial infrastructure is being provided by federal and state governments, corn growers, and regional biomass programs, who have committed a total of $800,000. The U.S. Department of Energy (DOE) is the largest sponsor, with $250,000 going to build ethanol infrastructure through a Notice of Program Interest (NPI) grant, said Lampert. The typical E85 refueling station costs $40,000 for equipment and labor combined. The E85 retailers will obtain $20,000 in equipment at no charge, but will spend about $20,000 per station on labor for installation.

Potential vehicle purchasers include the U.S. General Services Administration and 11 states that have already indicated their intention to purchase ethanol vehicles. The corn growers anticipate agribusinesses across the Midwest will also purchase E85 vehicles for their fleets.

IMW ATLAS QUADRUPLES REVENUES WITH CNG COMPRESSORS

In just 1 year, Louisville Clean Cities stakeholder IMW Atlas Industries, Inc. has used the Clean Cities network to increase sales for natural gas compressors and refueling equipment; expanding from one client—the Rogue Valley Transportation District—to more than a dozen across the United States.

“We think that over the course of the next few years, the market will just take off,” said Rich Gimmel, president of IMW Atlas. “Clean Cities has really increased the attention on alternative fuels. IMW Atlas designs and manufactures single- to four-stage natural gas compressor packages with time-fill or fast-fill capabilities. Revenues exceeded $1 million in the first year, were $3 million as of early 1995, and could reach $8 million by the end of the year. The staff currently numbers about 12 and may increase to 20 by the end of 1995.”

IMW Atlas has been involved with Louisville’s Clean Cities program since the beginning. “[The] Clean Cities designation has been a big factor in Louisville, and we are now talking with two Clean Cities signatories about putting in refueling stations,” continued Gimmel.

Angie Gimmel, marketing director at IMW Atlas, added that the company has contacted other Clean Cities coordinators to get a feel for each city’s fuel interests and to market IMW Atlas products accordingly. In addition to

Clean Cities Hotline 1-800-CITIES

Ford’s MY1996 E85 flexible-fuel Taurus Sedan
leading compressor system packager, engine distributor, and industrial machine repair specialist. Atlas found IMW several years ago during a project with Louisville Gas and Electric. The two companies share common business philosophies: to provide high quality products and dependable service to customers to maintain long-term business relationships. IMW Atlas—in response to customer frustration from the lack of service for CNG refueling equipment—also provides dealer training and local service as part of each customer's service package.

In addition to using Clean Cities to expand its own business nationally, IMW Atlas is the primary benefactor of DOE's pilot program state grant to Kentucky, one of 19 such grants awarded in late 1994.

With these additional funds, IMW Atlas will install three public CNG refueling stations in Owensboro, Louisville, and Corbin, Kentucky—providing an east-west link in the state and ultimately helping to close the gap between the Northeast and Midwest alternative fuel refueling corridors. These new CNG refueling stations will include IMW's natural gas partners of SuperAmerica, Thornton Oil Company, and Delta Natural Gas.

Melissa Howell, coordinator for the Louisville Clean Cities Program, says that one of the primary criteria DOE used in awarding the grants was Clean Cities designation: "Not only is IMW Atlas benefiting from the Clean Cities Program in terms of marketing, but Kentucky received the DOE grant in part because of the commitment of stakeholders, like IMW Atlas."

**CLEAN CITIES STAKEHOLDER**

**ECOGAS CREATES JOBS WHILE CLEANING AIR**

An Austin, Texas-based Clean Cities stakeholder is helping cities tackle several air quality problems at once through recovery systems and use of a domestic renewable fuel.

Growing from four employees just 2 years ago to 80 employees in several U.S. cities, ECOGAS Corporation has been successfully marketing liquefied natural gas (LNG) to an expanding number of cities and private companies. LNG is normally derived from pipeline gas (a non-renewable fossil fuel), but the LNG ECOGAS markets is derived from landfill gas—an ever-renewing source for methane and other gases that can be made into motor fuel.

ECOGAS can recover 10,000 and 30,000 gallons of LNG per day at landfill sites in Houston and Dallas, respectively, using membrane and liquefaction technologies that the company developed. ECOGAS also cleans impurities from the landfill gases to produce high-quality LNG.

"By capturing the gases from the landfills, ECOGAS helps cities meet tough Clean Air Act requirements to reduce methane and olefin emissions produced by these landfills, while selling clean LNG to fleets," explained ECOGAS President Jerrell E. Branson. Burning the natural gas in city or private fleet vehicles can almost eliminate carbon monoxide emissions, reactive hydrocarbons, and particulate matter. With optimized engines, the fuel can also significantly reduce oxides of nitrogen emissions.

In its partnerships with Dallas, Houston, and soon with the Clean City of Atlanta, the company invests its own capital to build recovery, liquefaction, and distribution systems for LNG. In return, ECOGAS obtains the rights to sell the fuel, then contracts some to the cities and private fleets and distributes the rest for other industrial uses.

Branson said he sees a bright future for the company, primarily because of the economic advantages of using LNG versus diesel fuel in heavy-duty vehicles, which he calculates to be a savings of 3 to 4 cents per mile.

Public and private partnerships also have a lot to do with market expansion, he said. Cities have provided ECOGAS a resource in their landfills and a market outlet for LNG motor fuel sales. The federal government has provided tax credits of $1 per million Btu for landfill gas recovery. DOE provides funds to the City of Houston to demonstrate several refueling technologies that will directly benefit ECOGAS. Branson said he sees DOE's Clean Cities Program as a significant

(Continued on page 8)
Ford and Chrysler See Marketing Opportunities in Clean Cities

Two major American auto manufacturers will use Clean Cities networks as launching pads for their expanding alternative fuel vehicle (AFV) product lines. This summer Ford Motor Company and Chrysler Corporation kicked off their marketing efforts by bringing local Clean Cities partners together.

"It's fairly simple," said Jeff Hardy, co-director of Clean Cities. "There are three critical stakeholders: fleet operators, fuel suppliers, and automakers. These programs allow us an excellent opportunity to bring them all into the same room and do business."

Last July, the Ford Motor Company initiated a four-city tour in California to educate the public about its model year 1996 vehicles. The effort is part of its national "rollout" strategy, which emphasizes targeting the Clean Cities Coalitions to serve as a potential customer base. The rollout will hit 36 cities in all and will be carried through the end of November 1995. (A schedule of the rollout follows.)

"We have two jobs to do in our marketing efforts. We have to convince fleets to use alternative fuels and then we have to convince them to buy our vehicles that run on those alternative fuels," said Tom Arrushin of Ford Motor Company. "With the Clean Cities network, we don't have to sell the concept of alternative fuels, we only have to sell the vehicles, which is what we do best."

Each appearance typically consists of a detailed description of the product line by a Ford representative, followed by presentations by the U.S. Department of Energy (DOE), local Clean Cities stakeholders, the state energy office, air quality districts and other governmental entities who talk about various mandates and incentive programs. The local natural gas utility is also present to discuss available incentives and infrastructure development efforts.

Chrysler has taken regional AFV marketing events to numerous cities since 1994. "But people wanted a more concerted effort," said Mike Clement, Chrysler's AFV sales manager. In addition to its wider efforts, this year Chrysler will focus on building what Clement calls "a Super Clean City" in Philadelphia, Pennsylvania, and Atlanta, Georgia. "It's really a partnership between Chrysler, Clean Cities, and DOE," he said.

On June 26, Chrysler Corporation and the Philadelphia Clean Cities coalition held a strategy meeting to introduce a concentrated sales and marketing effort to promote natural gas vehicles (NGVs) and support refueling infrastructure. The project is scheduled to be officially launched in September, followed by a similar market launch in Atlanta in October.

Chrysler's ultimate goal is to secure 50% of the van and pickup fleet market for NGVs, totaling several thousand in sales in the Philadelphia area. This unprecedented event marks a serious commitment on the part of Chrysler to achieving Clean City objectives.

Chrysler's strategy will include incentives to dealers, sales and service support staff at Philadelphia-area Chrysler dealerships, and a local advertising campaign. Dealers will have NGVs on the showroom floor for customers to test drive. "We're counting on support from Clean Cities for publicity and identifying potential customers," Clement said. In Philadelphia, PECO Energy and Philadelphia Gas Works will help develop the infrastructure. "Overall help will come from DOE to help pull this thing together."

The 8- to 12-month sustained marketing efforts will help the auto manufacturer in more than two selected cities, Clement said. "We expect to find out what it will take to get a significant number of natural gas vehicles sold, and take what we learn nationwide."

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**Estimated 1996 OEM Alternative Fuel Vehicles**

<table>
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<th>OEM</th>
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<th>Fuel Type</th>
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<td>Ethanol (E85) Methanol (M85)</td>
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<tr>
<td></td>
<td>Crown Victoria</td>
<td>CNG</td>
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<td></td>
<td>F700</td>
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<td>Dodge Dakota pickup</td>
<td>CNG</td>
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<td></td>
<td>Dodge Ram pickup</td>
<td>CNG</td>
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<td>CNG</td>
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<td></td>
<td>Plymouth Grand Voyager</td>
<td>CNG</td>
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</tbody>
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Source: U.S. Department of Energy

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Clean Cities Hotline: 1-800-CCITIES
U.S. Postal Service Delivers Support to Clean Cities

Clean Cities coordinators may find an eager partner at their local post office. The U.S. Postal Service (USPS) has more than 3,500 alternative fuel vehicles (AFVs) nationwide and plans to place another 3,000 by the end of 1995.

"Our main objective is to place them in Clean Cities," said Richard Harris, USPS vehicle maintenance specialist. Only when there is a lack of commercial fueling opportunities in Clean Cities does he then look to other non-attainment areas that aren't Clean Cities for vehicle placement. St. Louis and Portland are the only Clean Cities without postal AFVs, Harris said, and added that St. Louis will get compressed natural gas (CNG) postal vehicles later this year.

The local postal services are often involved with the Clean Cities programs before designation takes place. The Peoria postal service played a major role in the city's efforts toward Clean Cities designation last November. Since then the Peoria postal service has converted 113 long-life delivery vehicles to run on CNG and is now taking bids for slow-fill fueling sites at two of its stations.

The Peoria postal service recently incorporated Clean Cities into its Child Link program. Under Child Link, letter carriers visit area grade schools to let children know they can turn to carriers when they need help. The carriers also talk about the postal service's role in cleaning the air and distribute Clean Cities coloring books, said Karthi Robb, assistant to Postmaster Susan Warren.

The Austin postal service will soon receive 97 CNG delivery vehicles. At the designation of Dallas as a Clean City in July, the USPS announced plans to add 845 CNG vehicles to its local fleet. The USPS announced 75 CNG vehicles are joining its fleet in southeast Wisconsin at the International Alternative Fuels Conference held in Milwaukee this past June.

Most of the USPS AFV fleet is in California. Its more than 1,000 AFVs in the state are distributed in San Diego (112), Long Beach (119), Sacramento (200), the Los Angeles area (348) and the Bay Area (121). More are on their way and will arrive by the end of the year.

The Minneapolis postal service joined Minnesota's efforts toward Clean Cities designation as soon as it became aware of the program, said fleet manager Paul Ryberg. That was after he converted 72 long-life delivery vehicles to CNG dual-fueled last April, making the USPS the second-largest natural gas vehicle fleet in the state. The 72 vehicles are just phase one, he added.

Although the vehicles are dual-fueled, Ryberg said the goal is to run them on CNG 100% of the time. Finding fueling sites is his biggest problem.

Ryberg is enthusiastic about AFVs because they present an opportunity for cleaner air, and lower fuel and maintenance costs, he said.

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Stakeholder Columbia Gas Promotes NGVs Over the Long Haul

From its first fueling of a natural gas-powered Dodge with a 3/4-ton fuel tank in 1927 to its fleet of more than 1,000 natural gas vehicles (NGVs) today, Columbia Gas System is a Clean Cities stakeholder with a major long-term commitment to developing a market for natural gas, according to Columbia Gas NGV Marketing Vice President Tim Davis.

Columbia Gas System is one of the largest integrated natural gas producers in the country and is also a propane supplier. It transmits gas to 16 states and provides retail natural gas distribution in Ohio, Pennsylvania, Maryland, Virginia, and Kentucky.

In the 1980s, company officials decided Columbia would have to become a leader in promoting natural gas as an alternative fuel if the fuel was to succeed in the marketplace. Today Columbia Gas provides refueling services for 2,000 NGVs in addition to its own. It also will have more than 60 refueling stations open in its marketing area by mid-1995, according to Davis.

In addition, Columbia Gas conducts at least six research projects with engine manufacturers and others to further develop the use of natural gas as a motor fuel.

One of the company's most ambitious goals is to create a network of clean corridors with compressed natural gas (CNG) refueling sites linking Toledo, Ohio to Virginia Beach, Virginia, and link each city to Philadelphia, Pennsylvania and Lexington, Kentucky. This will allow fleets in these areas to use dedicated NGVs without worrying about running out of fuel.

Davis lauded the Clean Cities program for helping to increase public awareness of alternative fuels. "The Clean Cities program provides to stakeholder industry and local and state governments a framework for sharing information they wouldn't even know existed." For example, said Davis, companies with stationary source pollution concerns have come to Clean Cities meetings to find out how they can work with the Clean Cities program to become better corporate citizens and potentially find emissions credit trading partners.

Expansion of alternative fuels marketing under the Clean Cities program can bring substantial employment benefits to local communities, said Davis. More than 130 organizations in Ohio serve the burgeoning NGV industry. These include automobile, engine and compressor manufacturers, fuel distributors, conversion facilities, gas companies, colleges, and laboratories. "Off the cuff, I would say that our natural gas programs have stimulated more than 1,000 jobs in Columbia Gas' operating area." Comdyne, an Ohio-based manufacturer of natural gas cylinders, now has 50 jobs devoted to NGV-related activities, said Davis.

Because Columbia Gas generally serves areas outside large cities, "all of the conversions in our areas are being done based on economics, not federal mandates or incentives," said Davis. It is because of this independence that, Davis said, "we are the best positioned organization involved in alternative fuels in the country."

Clean Cities Hotline: 1-800-CCITIES
CLEAN CITIES KEEP FOCUS ON ALTERNATIVE FUELS

Since the last issue of the Clean Cities Drive, four new Clean Cities have been designated. Southwest Kansas, Central New York, Dallas-Fort Worth, and Honolulu have brought the total number of Clean Cities to 38.

HONOLULU, HAWAII — AUGUST 29, 1995

Honolulu, Hawaii was the most recent—look for details of its August 29 designation in the next Clean Cities Drive.

DALLAS-FORT WORTH, TEXAS — JULY 25, 1995

When Dallas-Fort Worth was officially designated the 37th Clean City on July 25, the area already included 1,629 alternative fuel vehicles (AFVs) being refueled at 87 stations. Stakeholders expect to increase that number with an additional 6,174 AFVs by the end of 1998; many of them will do so by complying with the 1992 Energy Policy Act.

The North Central Texas Council of Governments has emphasized an extensive public refueling infrastructure as part of the Dallas-Fort Worth Regional Clean Cities program. CNG and propane suppliers have announced a general commitment to opening additional refueling stations as demand develops over the next several years.

Stakeholders signing the Memorandum of Understanding include: American Airlines; Mesa Environmental; Lone Star Energy Company; and the Dallas-Fort Worth International Airport.

The latest Clean City will also host an ambitious program that concentrates on a high-fuel usage fleet. The Texas Alternative Fuels Council has allocated $200,000 in the 1995 fiscal year to convert 200 privately-owned Dallas-Fort Worth area taxicabs to propane, saving more than a million gallons of conventional gasoline each year.

CENTRAL NEW YORK — JUNE 15, 1995

On June 15 the "Clean Communities of Central New York" became the 36th addition to the Department of Energy's Clean Cities program. Central New York enters the program with approximately 170 AFVs, mostly CNG and the remaining propane and electric. Four new CNG fueling stations are scheduled to open over the next 2 years, and Sun Oil Co. has expressed interest in building new propane stations.

The local Clean Cities Coalition plans to add 90 CNG vehicles by the end of 1995; 235 in 1996; 312 in 1997; 414 in 1998; and 558 in 1999. More than half of the new AFV acquisitions are expected to come from Niagara Mohawk Power Corporation and the New York State Thruway Authority. Other fleet additions will come from the City of Syracuse, the U.S. Postal Service, and the Syracuse/North Syracuse School Districts.

SOUTHWEST KANSAS — MARCH 30, 1995

Discussions that began in the local donut shop resulted in the designation of Hugoton and Liberal, Kansas on March 30. With a combined population of 10,000, the two represent the smallest Clean City coalition to date.

Southwest Kansas is not required by federal mandates to increase the use of alternative fuels or meet clean air standards, according to Jeff Hardy, co-director of the Clean Cities Program. The area does, however, sit atop the nation's largest gasfield, and residents have a significant interest in promoting the use of CNG. The local Clean Cities coalition plans to establish CNG courses and curriculum at the Liberal Area Vocation Technical School. Fuel suppliers include Mobil Oil, Merritt Oil Company, and Phillips 66.

Southwest Kansas enters the program with 210 AFVs (175 propane, 35 CNG) and plans to add 75 (mainly CNG) each year. Twelve would come from the Hugoton/Liberal partners and the rest from an expansion of the program into four adjoining cities—Dodge City, Garden City, Great Bend, and Ulysses.

ATLANTA, GEORGIA PREPARES FOR OLYMPIC CROWD

Atlanta continues to gear up for what may be the biggest showcase ever for AFVs—the 1996 Summer Olympic Games. To aid these efforts, Atlanta Gas Light Company (AGLC) recently received a $500,000 grant from the U.S. Department of Energy (DOE). The grant will enable AGLC to provide technical assistance to the Metropolitan Atlanta Rapid Transit Authority (MARTA) as it replaces 200 of its oldest diesel-powered buses with CNG buses.

"Grants such as this encourage creativity and support the initiative of state and local governments," said Christine Ervin, Assistant Secretary for DOE's Office of Energy Efficiency and Renewable Energy, who awarded the grant. The grant also includes public information and education programs, a training program for transit system operators and mechanics, and a review and evaluation of data comparing the use of CNG to diesel.

Atlanta Clean Cities stakeholders have mounted an enormous effort to bring 500 alternative fuel transit buses (CNG, LNG, and electric) from more than 30 states to transport Olympic spectators.

Stakeholders also plan to continue expanding local refueling infrastructure. This includes developing a program with MARTA to purchase CNG buses as replacements and develop related infrastructure. MARTA will buy up to 200 AFVs over the next several years.

Atlanta stakeholders also set up a $1.3 million revolving loan fund using the U.S. Department of Transportation's Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds through the State Energy Office. Funding from this program will be loaned interest-free for the incremental cost of converting vehicles.

BOSTON, MASSACHUSETTS USES CMAQ FUNDS FOR AFVs

The Greater Boston Clean Cities Initiative has developed an approach that promotes the use of dedicated AFVs in municipal and state fleets. The Boston program put together an innovative plan to use the strict emissions requirements in the State Implementation Plans (SIP—U.S.
Environmental Protection Agency-required state plan to reduce emissions required by the Clean Air Act) to obtain funding under the CMAQ program. Under CMAQ, funds may be used to transition publicly owned fleets to alternative fuels, if such a transition is needed to meet a Clean Air Act mandate or if the SIP adopts alternative fuels as a control strategy.

The Boston Metropolitan Planning Organization (MPO), a stakeholder in the process, will receive $3.5 million in CMAQ funds annually to develop a refueling infrastructure.

The Boston initiative has a goal of adding five refueling/recharging facilities annually that can support up to 1,000 additional AFVs each year. Currently the program has about 450 AFVs in use and several natural gas refueling sites and electric recharging facilities in the area.

Boston stakeholders, working with the city's fire department, have successfully removed a major barrier to alternative fuel use in the city. After studying the issue, the Tunnel Steering Committee recommended that CNG vehicles be allowed to travel through tunnels and underpasses in the City of Boston. In its tunnel study, the Center for Fire Safety Studies of Worcester Polytechnic Institute showed that a CNG fuel accident would actually pose a lesser fire and explosion hazard and produce a smaller flammable zone than would an equivalent gasoline spill.

**CHICAGO, ILLINOIS DEMONSTRATES HEAVY-DUTY AND BIODIESEL**

The Chicago area Clean Cities program has been busy seeking funding from a number of sources to promote new and expanded activities related to alternative fuels.

Chicago was awarded $60,000 from DOE to cover a portion of the incremental costs for engines, engineering, and data collection to compare refuse trucks running on E85 (85% ethanol), biodiesel, propane, and natural gas. Chicago also received $50,000 from the Amoco Foundation to purchase two dedicated CNG minibuses, which will be used by city environmental inspectors to test their range.

Chicago also received an Urban Consortium Energy Task Force grant for $75,000 to conduct a supply/demand analysis for biodiesel from used cooking oil and other fats. The study will be conducted by the University of Illinois' Energy Resources Center. The project includes a demonstration of biodiesel in Chicago's refuse truck fleet and police patrol boats.

In other news, Chicago and six Northern Illinois counties received $73,000 from DOE's Notice of Program Interest (NPOI) awards for a project to provide fleets with readable information on federal regulations that will affect them.

**DENVER, COLORADO OFFERS REBATES FOR CONVERSIONS**

In a public-private initiative, the Colorado Office of Energy Conservation's conversion rebate program began on January 15, 1995. In addition to the state's award from the DOE NPOI pilot program last year, seven alternative fuels companies have agreed to meet the $500,000 committed by the state. Individuals and companies can receive partial rebates for converting or buying vehicles fueled by CNG, propane, M85 (85% methanol), or electricity. The greater the air quality benefit of the particular vehicle, the higher the rebate.

In addition, Denver expanded the definition of acceptable alternative fuels at Denver International Airport (DIA) to include propane. Denver is also purchasing three CNG-powered buses for city use at DIA.

**NEW LONDON, CONNECTICUT TO START AFV SHUTTLE SERVICE**

The Mashantucket Pequot Tribal Council of Ledyard, Connecticut plans to use $2 million to purchase about 20 alternative fuel buses for its community. The current fleet consists of about 100 vehicles, and shuttles 9,300 employees and (Continued on page 8)
Clean Cities Focus (Continued from page 7)

patrons (peak: 40,000 per day) of the 2-year-old tribe-owned Foxwoods Resort Casino from satellite parking lots. Buses also run from the nearby metropolitan areas of Boston and New York, as well as other major cities in Connecticut, Massachusetts, New York, and Pennsylvania.

"The tribe is committed to improving air quality in a region that has not been one of the better regions," said Tribal Council member Michael Thomas, Clean Cities participant and former head of the tribe's Environmental Health Department.

Philadelphia, Pennsylvania Recognizes Local Contributions

In commemoration of the 25th anniversary of Earth Day last April, Philadelphia held the Greater Philadelphia Clean Cities Program AFV Recognition Ceremony and sponsored an AFV Caravan in the Philadelphia metropolitan area. Thirty-six local businesses and organizations were honored at the recognition ceremony with certificates signed by both DOE Secretary Hazel R. O'Leary and Philadelphia Mayor Edward G. Rendell.

The groups were recognized in part for strengthening the local economy and enhancing public awareness of alternative fuels through their support of the Clean Cities program. Although many of the groups honored were not Clean Cities stakeholders, all had acquired AFVs, installed refueling stations, and/or performed conversions, and may become official stakeholders in the future.

During the same week, the AFV Caravan made appearances at Villanova University, Pennsylvania State University, and West Chester University over a 3-day period. Groups involved included Boeing Defense & Space Group; International Electric Vehicles; Philadelphia Newspapers, Inc.; and Snyder's of Hanover, Inc. For more information, call the Clean Cities Hotline or the DOE Philadelphia Regional Support Office (215-656-6977).

San Joaquin Valley, California Unites in Funding Efforts

One of Fresno's big accomplishments was to earn the award of more than $2 million from the San Joaquin Valley Unified Air Pollution Control District's AB2766 funding for clean air projects. Sixteen California Clean City Coalition members submitted proposals, receiving more than 50% of the almost $5 million available. Clean Cities Coalition members received $925,000 for five public CNG refueling stations and more than 200 vehicle conversions. According to Ken Nerlend, coordinator for the program, "membership in our Clean Cities Coalition enhanced not only the approval rates of the projects, but also funding levels. Coalition members received 2.6 times the award money as non-Coalition members. In general, the synergy associated with a Clean Cities Coalition can overcome significant financial, technical, and educational hurdles, which would be unmanageable as separate agencies or entities."

Waterbury, Connecticut Opens AFV Tech Center

Waterbury's Clean Cities designation coincided with the opening of the Alternative Fuel Vehicle Technology Center at the Naugatuck Valley Community Technical College. The Center provides education and training courses to support Connecticut's compliance with the CAAA, which includes public acceptance of new and reliable low emissions transportation systems. The Center provides an Automotive Technician Program, applied research on alternative fuels, and advanced equipment for testing and training mechanics on alternative fuels.

The alternative fuels training fleet includes electric, methanol, natural gas, and propane vehicles. The school features state-of-the-art emissions equipment. Also included are a natural gas fueling station, computerized ECOGAS (Continued from page 3)

way to advertise and assist the marketplace for clean fuels. "The main benefit the Clean Cities Program provides is a venue for visibility of alternative fuels," he said. "Our involvement in the program also has made us much more aware of opportunities that exist in the marketplace."

Branson said he believes significant marketing opportunities abound for alternative fuels in areas that are nearing nonattainment of Clean Air Act requirements. As a first step, city officials need to be educated on staying in attainment to avoid potentially enormous expenses if their cities become nonattainment areas, he said.

"In the future, we would like to put up an interstate highway-based fueling network with an LNG station every 300 miles to fuel heavy-duty trucks and cross-country buses," said Branson.

Branson said he does not see a big market in the near term for transit buses because of the low relative cost of non-taxed diesel fuel. But he is upbeat about his company's ability to serve that market when it emerges. "We're ready when they are," he said.

(Continued on page 9)
CLEAN CITIES FOCUS  (Continued from page 8)

automotive simulation laboratory, and a welding fabrication laboratory. For more information, contact automotive technician coordinator, Barry Groman, at 203-596-8797.

Waterbury has talked to the management from 13 suburbs and the local Council of Governments about joining Clean Cities efforts in order to increase purchase numbers on bids for original equipment manufacturer (OEM) vehicles, according to Clean Cities Coordinator Monroe Webster.

Waterbury also recently hosted the American Tour de Sol electric and solar vehicle road rally. The Clean Cities program was represented at a related weekend activity at Naugatuck Community College.

(WISCONSIN CLEAN CITIES SOUTHEAST AREA HOSTS TRAINING SERIES)

Emphasizing education and outreach in its mission, the Wisconsin Clean Cities Southeast Area (WCC-SEA) program and the University of Wisconsin-Milwaukee are planning to sponsor a series of 2 to 3 day technical training programs for public fleet managers to get up to speed on maintaining and repairing AFVs. The series will provide sessions on preventive and corrective vehicle maintenance, repairs, safety, and emissions. Technicians involved in the Wisconsin Local Government Grant Program are the first target audience. Under the grant program, 60%-100% of the incremental costs of buying or converting a vehicle to an alternative fuel are covered. More than 300 vehicles are included.

LAS VEGAS, NEVADA CONVERTING CITY FLEET TO CNG

Las Vegas is converting 82 city vehicles to CNG. A total of 111 are expected to be converted by the end of September and 150 by June 1996. Unlike most cities, Las Vegas performs its own conversions.

“We’re entering the next phase where we’ll have 600 converted vehicles operating on CNG in the region,” said Clean Cities coordinator Dan Hyde. Next year the city will make 15% of its fleet purchases CNG vehicles, relying on vehicles purchased from Chrysler. Clark County is waiting to receive its 1995 fiscal year order of nine CNG vehicles—a mix of vans, sedans, and pickup trucks. Two bi-fuel CNG street sweepers will join the existing four.

The number of fueling sites to support the vehicles is also growing. Last year there were only two CNG stations, Hyde said, and now there are six. The city fleet uses three public fuel sites that were built with private investment.

The Regional Transportation Commission now uses more than 70,000 gallons per month to fuel its 100 dedicated CNG buses and is considering opening its fueling sites to the public. Nellis Air Force Base has installed a site to fuel its fleet, and McCain International Airport plans to do the same.

There has also been a lot of activity to promote alternative fuels use in Las Vegas. Using a grant from the U.S. Department of Energy, the city plans to acquire a CNG "media van" this fall to visit local schools and perform other educational functions. Students will name the van and design logos in a contest. The city also plans placing radio public service announcements as well as a billboard near the city’s busiest interchange.

ALBUQUERQUE, NEW MEXICO HIGHLIGHTS COMMUNITY EVENTS

The efforts of the Albuquerque Clean Cities Coalition at local community events, including Earth Day, an auto show, and a ride-sharing promotion, have increased the exposure of AFVs and the Clean Cities program. In fact, the large turnout of AFVs at the Albuquerque Museum’s 11th Annual Auto Show held this spring called for a special category, “non-gasoline vehicles.”

The program continues to expand. The fast-growing nearby community of Rio Rancho (just north of Albuquerque) was invited to join the Clean Cities effort. Rio Rancho is starting a transit system and is interested in using natural gas buses.

Albuquerque’s “Rally for the Environment” last August showcased AFVs to let the public know how the more than 3,000 AFVs in New Mexico help maintain clean air. The day was hosted by the Albuquerque Chapter Electric Automobile Association, and sponsors included the City of Albuquerque and DOE Clean Cities. The day featured a scavenger hunt, Ride and Drive, and vehicle displays.

PEORIA, ILLINOIS PREPARES FIRE DEPARTMENT FOR AFVs

The Peoria Fire Department has converted three of its Command Suburban Chevrolet vehicles to CNG. The Clean Cities program has worked with the fire department’s training

Clean Cities Hotline: 1-800-CCITIES
STATE CMAQ FUNDS ASSIST ALTERNATIVE FUEL PROGRAMS

While ideas and enthusiasm are abundant, funding can be a major hurdle for Clean Cities trying to fulfill their alternative fuel vehicle (AFV) fleet goals. Many states are successfully filling these gaps with funds from the Congestion Mitigation and Air Quality Improvement (CMAQ) Program established under the Intermodal Surface Transportation Efficiency Act of 1991. More than 9% of the $1.75 billion distributed to the states over the past 2 years through CMAQ went toward alternative fuel projects, according to Federal Highway Administration (FHWA) numbers, compared to the less than 1% estimated in the first year.

CMAQ was established to provide funding to states for transportation projects that will reduce emissions and improve traffic flow. The program calls for $6 billion to be distributed from 1992 to 1997, with the expectation that most would be spent on mass transit, ride-sharing, inspection/maintenance, and pedestrian/bike programs. However, flexibility was built into the program to allow states to fund the programs that best fit their goals.

Several metropolitan areas in designated Clean Cities have benefited from those options, including:

- **Sacramento**: 10 CNG buses, one electric trolley
- **Chicago**: 100 CNG buses, one fueling station
- **Syracuse**: Seven CNG buses, one fueling station
- **Dallas-Fort Worth**: 4,008 AFVs, among area governments through a CMAQ grant over 3 years
- **Louisville**: Converting 500 light and medium-duty vehicles.
- **Boston**: Five refueling/recharging sites each year for 3 years.

“Clean Cities is part of the Energy Policy Act, but we see it in broader terms,” said Tommy Foltz, co-director of the Clean Cities program. “We are encouraged by FHWA’s initiative to facilitate funding to achieve multiple goals.”

CMAQ funds are apportioned to states with the most serious air quality problems, said Michael Savonis, air quality specialist for the FHWA. “Only three states receive 35% of the funds each year—California, Texas, and New York. Thirteen states control 75% of the funds,” he added.

“The alternative fuels industry has really gone after the funds, and I’m glad to see that,” Savonis said. “The book (A Guide to the Congestion Mitigation and Air Quality Improvement Program) was published before there was a lot of activity with alternative fuels. But I’ve been talking about a lot and I think the word is getting out.”

This year the FHWA released new guidance for how the funds are spent that could make it easier for alternative fuel programs to gain approval. One clause of the program stipulated that fleets must be publicly owned and operated to receive money for conversions. That prevented taxi fleets—often the highest fuel-users in a city—from receiving assistance switching to alternative fuels. Under the new guidelines, a publicly owned but privately operated fleet can now qualify, Savonis said.

Outreach such as public education and advertising programs can also receive more support, according to Savonis. To encourage innovation, the new CMAQ guidelines allow states to use up to 25% of their funds for experimental pilot projects as long as they include before and after studies.

The trend of alternative fuel program funding is one many would like to have continue. “I would like to see more municipal activity,” Savonis added. There are a few things a local agency can do that can improve its chances of a successful CMAQ application, according to Savonis. The most important are the following:

- Build the strongest case possible for air quality improvement.
- Make sure the program uses engines or kits certified by the U.S. Environmental Protection Agency.
- Get to know your metropolitan planning organization. It is important to be plugged in at the local and state levels.
- Include private/public partnerships in the program.

Nearly $1 billion is authorized for CMAQ each year. “We’ve been lucky with Congressional appropriations so far. The outlook for the future is much more uncertain, but we’re hopeful,” Savonis said.

For a copy of A Guide to the Congestion Mitigation and Air Quality Improvement Program or the new guidance, call the Clean Cities Hotline at 800-CCITIES.

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**US Postal Service** (Continued from page 5)

“Natural gas vehicles run cleaner and last longer. Our vehicles are designed to run 24 years with one engine replacement. We will see a substantial savings if we don’t have to put in that new engine.”

Clean Cities provided a vital network of information for Minneapolis. “It’s helpful to see what others in the Clean Cities program are doing,” Ryberg said. Ryberg has already set up fueling arrangements with Minnesasco and Amoco for two sites to support the vehicles.

Through Clean Cities he found out about several other fleets’ AFV goals and is working with them to plan additional sites. Ryberg’s territory includes most of Minnesota and the western third of Wisconsin.

The national USPS AFV program focuses on CNG because the fuel has already shown it is paying its way, according to postal service officials, but electric, methanol, and ethanol are also being tested. USPS soon hopes to have 36 electric vehicles in its test program, and has already introduced five ethanol vehicles in a Chicago test program.

By locating the vehicles in Clean Cities, the USPS can not only take advantage of existing coordination efforts, but help drive the industry and infrastructure development as well, said Charles Bravo, USPS Manager of Environmental Management Policy. The USPS has a big stake in the success of Clean Cities programs. “We intend to be a good environmental neighbor in each of the 40,000 communities we serve from coast to coast,” Bravo said. “We’re proud to be a partner with the Clean Cities program.”

Clean Cities Hotline: 1-800-CCITIES
CLEAN CITIES Focus (Continued from page 9)

academy in conjunction with a 2-week training program for 180 fire-fighters to learn how to respond to accidents involving AFVs.

Illinois passed a major alternative fuel incentives bill through the General Assembly, which was awaiting signature by Governor James Edgar. The Alternative Fuels Act provides rebates of up to 80% on the costs of conversions and incremental costs of new AFVs. The legislation also provides rebates to cover up to 80% of the incremental cost of purchasing alternative fuels that cost more than conventional fuels, including E85, bio-based methanol, and fuel derived from biomass. Under the bill, the fuel cost differential will be reimbursed over a 3-year period, according to the Illinois Natural Gas Vehicle Coalition.

IN OTHER CLEAN CITIES . . .

Provo City and the Jordan School District have joined the Salt Lake City Clean City program. Stakeholders recently provided input on the siting of two new state CNG fueling facilities and worked to support legislation to make Utah’s Clean Fuels Loan Program more adaptable to local needs.

. . . Long Beach, California is closer to its long-term goal of converting its entire 70-vehicle fleet of refuse trucks to CNG. In May, the City of Long Beach Gas Department, with joint funding from the South Coast Air Quality Management District (SCAQMD), opened a truck-sized CNG fueling station in the Port of Long Beach at its SouthEast Resource Recovery Facility. In addition to the city’s current fleet of five CNG refuse trucks and the 25 expected within the next year, the Long Beach Naval Shipyard’s natural gas vehicle fleet will also use the station.

. . . San Francisco was recently designated as “in attainment” by the EPA, “but we shouldn’t be slacking off,” said Clean Cities coordinator Ara Minasian. San Francisco still has to meet California’s stricter standards. A newsletter published by the Clean Air Coalition was mailed to more than 1,000 local fleet managers to make that point.

. . . Lancaster, California will soon become an Electric Vehicle Model Community, when the city installs six public charging facilities with a $140,330 grant from SCAQMD. That will be Lancaster’s third environmental designation; earlier this spring the area received recognition as California’s first Blue Sky City for its clean air programs, and was designated a Clean City last year.

. . . The Rogue Valley Transportation District (RVTD) recently put into service Oregon’s first fleet of public transit buses fueled exclusively by CNG. Ten 27-passenger natural gas buses, each featuring a “clean air” paint scheme of white clouds on a blue sky backdrop, entered regular revenue service July 10. A $2.5 million Federal Transit Administration grant funded the fleet purchase and the $425,000 construction of Oregon’s first fast-fill natural gas fueling facility to support the buses. IMW Atlas Industries Inc., of Louisville, Kentucky, is the general contractor for the fueling facility.

. . . Oakland’s Clean Cities “cousin,” Santa Rosa, recently added a CNG-powered train running from the Sonoma County station to the Napa Valley wine country, pleasing farmers, wine growers, and tourists alike.

The Clean Cities Drive would like to highlight the activities in your Clean City. Please call the Clean Cities Hotline at 1-800-CCITIES or fax your news to 1-703-528-1953.

Trouble-Shooting in Your Clean Cities Coalition

Looking for ways to make your Clean Cities coalition even more effective at getting alternative fuel vehicles (AFVs) on the road? DOE Headquarters has just released The Clean Cities Trouble-Shooting Guide to help cities like yours become even more successful in expanding the use of AFVs and developing refueling infrastructure. The guide provides detailed information on:

- Making your Steering Committee stronger and more effective
- Refining your organizational goals to inspire participation and progress
- Developing work plans and staff reports that provide direction, continuity, and support prudent decision-making
- Establishing working groups that make steering committees more effective
- Retaining and managing qualified staff
- Using stakeholders and the media to build support for needed programs
- Working with air quality officials to designate site implementation plans that promote AFV use

Distribution of the guide has been complemented by a series of regional workshops held in Denver, Baltimore, and San Francisco. Two more are scheduled for Boston in early October and Chicago-Milwaukee in mid-October.

The workshops have focused on Clean Cities accomplishments, using the Trouble-Shooting Guide to address organizational and process challenges, clarify problems, use "group power" to brainstorm solutions, and identify specifically what Clean Cities can do to effectively put AFVs on the road. The forums have also provided Clean Cities stakeholders, DOE headquarters and regional staff, and consultants the opportunity to meet with one another, sharing ideas and experiences that better equip everyone for the work ahead.

Copies of the guide and information on the workshops are available from the Clean Cities Hotline at 800-CCITIES (800-224-8437). Other items available from the hotline include: Road to Clean Cities, the new Clean Cities brochure Partnerships for a Strong Economy, and details of the DOE Pilot Program grant recipients.

Clean Cities Hotline: 1-800-CCITIES
**DOE Proposed Rules May Affect Clean Cities**

Clean Cities stakeholders recently got a glimpse of the Energy Policy Act of 1992 (EPACT) Notice of Proposed Rulemaking (NPR) which outlines fleet requirements for states and alternative fuel providers. Affected parties include those in metropolitan areas with 1980 populations of 250,000 or more, including many Clean Cities. Purchase commitments required by the rule will increase vehicle concentrations in Clean Cities, providing further impetus for vehicle and refueling investments. Clean Cities coalitions will, in turn, provide fleets with detailed information on the new requirements when they become final.

This spring, the U.S. Department of Energy also released details on the State and Local Incentives Program—jumpstarted last year by the Notice of Program Interest Pilot Project awards—which will continue to support alternative fuel projects in Clean Cities that are included in state plans showing EPACT compliance. The above NOPRs can be found in the Federal Register notices dated February 28 and March 21, 1995, respectively. You may also call the Clean Cities Hotline at 1-800-CCITIES (1-800-224-8437).

**Clean Cities Calendar**

**September 21**  
Missoula, Montana designation event;  
time/location TBD.  
Contact: Laura Adducci, 303-231-5750, ext.155

**October 10**  
Chicago Regional Troubleshooting Workshop;  
time/location TBD.  
Contact: Melinda Latimer, 312-886-8582

**October 17**  
State of Minnesota Troubleshooting Workshop;  
time/location TBD.  
Contact: Melinda Latimer, 312-886-8582

**October**  
Austin Stakeholders Retreat and Troubleshooting Workshop; date/time/location TBD.  
Contact: Bill Jernigan, 214-767-7182

**October**  
Central Arkansas (Little Rock) designation event;  
date/time/location TBD.  
Contact: Bill Jernigan, 214-767-7182