SCOTT A. THOMPSON
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

MARY FALLIN
Governor

June 30, 2015

Ozone Advance
Laura Bunte, Mail Code C304-01
U.S. EPA, OAQPS
109 TW Alexander Drive
Research Triangle Park, NC 27711

Dear Ms. Bunte,

The Oklahoma Department of Environmental Quality (DEQ), Air Quality Division, in collaboration with the Association of Central Oklahoma Governments (ACOG) hereby submits the Oklahoma City Metropolitan area 2015 update to our Ozone Advance program. This is a "living" document and will continue to be updated as programs are added or evolve. Central Oklahoma has participated in EPA's Ozone Advance program since May 30, 2012. The enclosed list of Ozone Advance initiatives and ongoing programs provides status updates to many of the programs listed in the 2014 submittal, along with several new programs.

The ground-level ozone reduction programs include a mix of voluntary and mandatory measures that we feel will aid our continued progress toward providing for improved air quality. The OKC Metro area attained the standard for the 2014 Ozone season, making two consecutive years of attainment. In addition to the more moderate weather in the area over the last two ozone seasons, it is our conclusion that participation in the Ozone Advance program continues to have a positive impact on ozone levels.

Also enclosed is an information sheet describing the progress with the OKC Metro area's two Village Green stations that are to be deployed this summer.

We look forward to continued participation in the Ozone Advance program.

Sincerely,

Eddie Terrill
Division Director
Air Quality Division

cc: Carrie Paige, EPA
John G. Johnson, ACOG

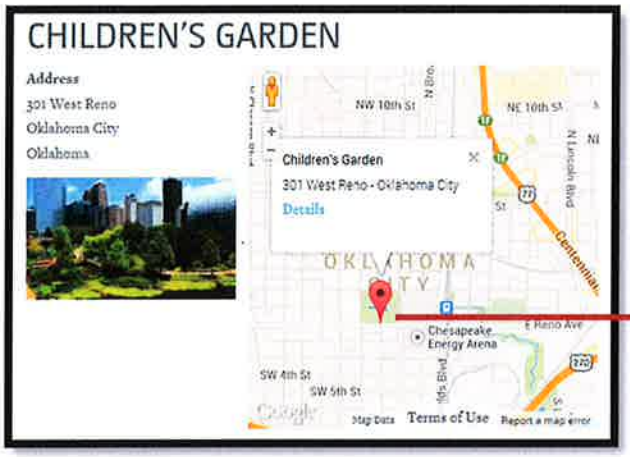
Enclosures

Village Green Air Monitoring Station

The Air Quality Division of the Oklahoma Department of Environmental Quality (DEQ) has received a grant from the U.S. Environmental Protection Agency (EPA) to install and maintain a Village Green Air Monitoring station as part of the Village Green Project.

EPA has developed an innovative prototype air and weather measurement system, called the Village Green station, to provide new ways for communities to learn about local air quality. The system is built into a park bench and measures two types of air pollutants – ozone and fine particle pollution – along with key weather parameters. The station components transmit real-time data to the Village Green website and to the public information display that accompanies the bench.

The DEQ is partnering with the EPA to install a Village Green station at the Children's Garden of the Oklahoma City Myriad Botanical Gardens. The station is scheduled for deployment in late June — early July of 2015.



The Village Green station for the Children's Garden location is currently in the fabrication process at EPA.

In addition, the DEQ has funded a second Village Green Air Monitoring station that is proposed to be installed on the University of Oklahoma campus in Norman, Oklahoma. The data from this station will be transmitted to the DEQ website and to the station's accompanying public information display.

The Oklahoma Village Green stations are intended for research and educational purposes — not for use as regulatory monitors. The data will supplement DEQ's Air Quality Advisory Program and expand public outreach opportunities.

The Air Quality Division of DEQ has already developed on-site presentations for the local universities at one of the traditional monitoring sites. Presentations at the OU Village Green station will give university students another opportunity to study urban air pollution and new monitoring technology—while presentations at the Myriad Botanical Gardens location will educate children and their families about general air quality information.

Ozone Advance Emission Reduction Projects - Oklahoma City MSA

Progress Report 6-1-14 through 5-31-15

Emission Reduction Projects	Entity	Status	Description	Schedule/Completion Dates
Air Quality Awareness Grants	ACOG	Ongoing	City, county and tribal governments along with public schools, public school districts and public universities are eligible to receive CMAQ funds for small infrastructure projects and public education programs that assist in the reduction of single-occupancy trips and/or ozone-forming emissions. **The 2014 funding cycle of the Air Quality Awareness grants closed on Friday, June 13. With $75,000 available via Congestion Mitigation Air Quality (CMAQ) funds, ACOG received four applications requesting a total of $66,272. Applications were reviewed and scored by a committee consisting of ACOG staff and representatives from the Oklahoma Department of Transportation, the Oklahoma Department of Environmental Quality, the Oklahoma State Health Department and the Oklahoma City-County Health Department. ACOG has $150,000 allowable to be spent for FY16. The award process is expected to begin in the second quarter of 2015.**	April 2014 - Continuous
Bike to Work Day	ACOG	Ongoing	Every year, the third Friday of May is designated as Bike to Work Day and communities throughout Central Oklahoma participate by holding group bicycle rides and events. In 2013, the cities of Oklahoma City, Guthrie, Midwest City, Moore, Norman, Yukon and Edmond all participated; in 2014, Norman, Yukon, Moore, Midwest City, Edmond, Piedmont, Oklahoma City and Guthrie are all participating with bike-related events throughout the month of May. **2015 Update: At the members' request, ACOG expanded coverage to Bike Month events while still celebrating Bike To Work Day. In 2015 the cities of Oklahoma City, Guthrie, Norman, Yukon and Edmond sponsored Bike To Work Day rides; in addition, the cities of Edmond and Moore sponsored family rides during Bike Month.**	2005 - Continuous
Central Oklahoma Commuter Corridors Study (CentralOK!go)	ACOG	Complete	Following up on recommendations from the 2005 Regional Fixed Guideway Study, CentralOK!go is the next step in the federal planning process for evaluating the feasibility of a regional transit system. This study will provide more in-depth analysis and information concerning an alignment, technology, ridership forecasts, estimated costs, and potential funding sources for each corridor.	2013 - 2014
GetAroundOK.com	ACOG	Ongoing	Encourages the use of alternative transit by providing information on carpooling, public transit and other means of green transportation. Users can log their green transportation use and search for carpools in their area. In 2014 13,862 commutes were logged throughout the region, resulting in the reduction of 5,921 trips and reducing fuel use by 12.2K gallons. **2015 Update: To date, 15,051 commutes have been logged throughout the region, resulting in the reduction of 5,921 trips and reducing fuel use by 11.1K gallons.**	2012 - Continuous

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Ozone Alert Day Notifications	ACOG	Ongoing	Email notifications of Ozone Alert Day declarations in Central Oklahoma are serviced to elected officials, policymakers and members of the public via email. 2014 Update: In 2013, three Ozone Alert Days were declared; notifications were sent to a total of 1,313 recipients with an average open rate of 26% and an average click-through rate of 8%. Linked content included information on public transit throughout Central Oklahoma, information on the health impacts of ground-level ozone and a link to the Oklahoma Department of Transportation online camera-based traffic monitoring system. **2015 Update: In 2014, one Ozone Alert Day was declared; notifications were sent to a total of 423 recipients with an average open rate of 29% and an average click-through rate of 13%.**	Continuous
Social Media Public Outreach	ACOG	Ongoing	Central Oklahoma's MPO utilizes Facebook and Twitter to keep members of the public updated on air quality and air quality-related issues throughout the region, state, country and world. Facebook metrics indicated a total of 4,098 people were reached from June 2013 to May 2014. **2015 Update: In 2015 Facebook reached 5,652 people. Twitter had a total reach of 4,244 impressions from January 2015 - May 2015 with 1,988 followers.**	2009 - Continuous
Transportation Alternatives Program	ACOG	Ongoing	Approximately $2.8 million will be administered to bicycle and pedestrian infrastructure projects throughout the Central Oklahoma region as part of MAP-21 through TAP. Eligible projects include on-road and off-road trails, safe routes for non-drivers, rails-to-trails conversions and Safe Routes to Schools projects. **2015 Update: The communities are working with ODOT, making progress toward implementing their projects.**	April 2014 - Continuous
Transportation Systems Management (TSM) Projects	ACOG	Ongoing	Emission reduction strategies that may include: intersection improvement projects, signal improvements, signal coordination efforts, Intelligent Transportation System (ITS) enhancements and bicycle and pedestrian facilities. These projects reduce transportation-related emissions by improving traffic flow and reducing congestion throughout the region.	Continuous
Walk to School Day, Bike to School Day	ACOG	Ongoing	These annual events offer schools the opportunity to promote the safe passage of students to school in an effort to encourage active transportation and a reduction in ozone-forming emissions that can form due to long, idling child pickup and drop-off lines. Thus far, 10 schools in Central Oklahoma have participated in these events in a total of seven Central Oklahoma communities. **2015 Update: In 2015, one school in Norman had an event on the national Bike To School website. Piedmont had activities the entire month of May to encourage students to bicycle to school.**	Continuous

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Emission Reduction Projects	Entity	Status	Description	Schedule/Completion Dates
Open Streets OKC	ACOG, Oklahoma City-County Health Department	Ongoing	Almost a mile of NW 23rd Street was closed off to vehicular traffic on Sunday, March 30, **2014**, to hold Oklahoma City's first Open Streets event. The event, intended to promote active transportation and the relationship between mode choice and public health, drew more than 20,000 people from across the region for a four hour period with more than 70 businesses and organizations participating all along the route. The event earned significant media coverage and calls for more walkable development, biking infrastructure and accessible, quality transit through Oklahoma City. The event is planned to now occur twice a year beginning in 2015. **2015 Update: The 2nd Open Streets OKC event was held in March, with 20,000 to 25,000 participants and 46 community activity providers. Planning has begun for a 3rd event in the fall, the first one in a new location south of the Oklahoma River.**	Continuous
Clean Fuel use	Central Oklahoma Clean Cities	Ongoing	The Central Oklahoma Clean Cities 2013 annual survey of stakeholder fleets showed a reduction of 2,969,766 gasoline-gallon equivalents (GGEs) of petroleum fuel used. The survey indicated that 98% of the recorded petroleum reduction can be attributed to alternative fuel vehicles. The remaining two percent can be attributed to alternative fuel use in off-road vehicles and to idle reduction policies undertaken by our stakeholder fleets. Central Oklahoma stakeholder fleets accounted for 5635 on-road vehicles operating on alternative fuels including 3,679 vehicles using compressed natural gas (CNG), one vehicle using liquefied propane gas (LPG), 711 vehicles using 85 percent ethanol (E85), 1,241 using 20 percent biodiesel (B20), and three highway speed, advanced battery technology, plug-in electric vehicles. **2015 Update: The Central Oklahoma Clean Cities 2014 annual survey of stakeholder fleets showed a reduction of 6,651,144 GGEs of petroleum fuel used. The survey indicated that 97% of the recorded petroleum reduction can be attributed to alternative fuel vehicles. The majority of the remaining reduction can be attributed to idle reduction fleet policies and technologies. Central Oklahoma stakeholder fleets accounted for 4,479 on-road vehicles operating on alternative fuels. Deployment of compressed natural gas (CNG) vehicles and fueling stations resulted in 86% of petroleum fuel reduction, followed by E85 ethanol-blend (8.8%), and LNG, liquefied natural gas (4.1%).**	1996 - Continuous
Downtown Trolley replacement	Central Oklahoma Transportation and Parking Authority	Complete	Replaced the 13-year-old downtown trolley fleet servicing Downtown Oklahoma City with 6 new 30-foot buses.	January 2013
EMBARK - Free fare during ozone season	Central Oklahoma Transportation and Parking Authority	Ongoing	During the ozone season (May-September) Oklahoma City metro transit provides free transportation on all fixed-route buses on the third Friday of every month. This includes express commuter routes operating to and from Norman.	Continuous
Alternative fuels use	City of Edmond	Ongoing	The City approved Resolution 02-06, directing the City Manager to pursue plans supporting the utilization of plug-in hybrid electric vehicles. The City has utilized E85 and B20 blends for the past several years, but now is focused on pursuing other options for alternative fuels, such as LPG. Currently, for the bus fleet, 3 buses are CNG, 5 are LPG, and 4 run on ULSD. One Edmond Electric utility truck has been converted to a PHEV, which runs on electrical power provided by wind. A propane fueling station was also installed at Vehicle Maintenance in 2013. **2015 Update: Efforts to pursue alternative fuels and "right-sizing" the vehicle fleet for City employees is ongoing.**	Continuous

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Emission Reduction Projects	Entity	Status	Description	Schedule/Completion Dates
Bicycle Master Plan & Alternative Transportation	City of Edmond	Ongoing	The Bicycle Master Plan, completed in 2012, defines a network of trails and on-street bicycle/pedestrian corridors to promote bicycling as a viable form of transportation throughout the City. This enhances the 1999 Edmond Trails and Sidewalk Master Plan to include on-street bicycle facilities. In 2013, 2 miles of bike lanes were completed around the University of Central Oklahoma. Side paths along the arterials Covell Rd and Kelly Rd were also completed, totaling approximately 6 miles. **Arcadia Lake Coalition:** A Public/Private partnership has been formed with the goal of creating a bicycle/pedestrian trail around Arcadia Lake. **Spring Creek Trail:** This will be a new trail that will go from the East side of I-35, under the highway, and along Spring Creek to Spring Creek Park at Arcadia Lake. **Fox Lake Trail:** The Fox Lake Trail will go from 15th and I-35, behind the new Wal-Mart, to Fox Lake Ln, where there is a planned Wellness Park and head to the Spring Creek Trail. **2015 Update: The Fox Lake Trail is complete and stretches from Fox Lake Ln, behind the new Sam's Club and Walmart SuperCenter to connect with 15th St. The Spring Creek Trail is almost ready to begin construction. The Arcadia Lake Trail Coalition continues to raise money, while the City is applying for the USDOT Tiger Grant to help supplement costs for the Arcadia Lake Trail. The City is also applying for the TAP grant through the Oklahoma Department of Transportation to help fund new trail efforts.**	Continuous
City Facility Rehabilitation II Facility Maintenance	City of Edmond	Complete	Among improvements that will be made are white roofs, LED lighting, and more energy efficient HVACs. Three buildings received white roofs in 2014. They are Mobile Meals, the Downtown Community Center, and the Historical Museum. Four buildings received LED lighting. They are Mobile Meals, the Historical Museum, Kickingbird Golf Club, and one Zone at the Crosstimbers Municipal Complex. The new Edmond Downtown Health Clinic also has LED lighting. Four buildings received more energy efficient HVACs this in 2014. They are Fire Stations 1, 2, and 3, and the Downtown Community Center. The Downtown Community Center will require 8 units. **2015 Update: In 2015 six out of seven HVAC units were replaced on the Mobile Meals facility with higher SEER ratings. The new Water Distribution Station on Danforth Rd has LED lighting and geothermal heat pumps. Also, the Water Treatment Plant is going to change out some large wattage lights (1000 watts each) in their filtering room to LED lights.**	2015
Decrease Idling Time	City of Edmond	Ongoing	Meet with staff about the expense of excessive idling. **2015 Update: The Fleet Maintenance Manager has addressed this with staff. We are also going to produce an informational flyer for employees completing their safety and departmental orientations.**	Continuous
Efficiency Committee	**City of Edmond**	**Ongoing**	**In 2014 City staff created a new internal committee that will meet every three months made up of City department heads and management staff. The role of the committee is to discuss operational efficiencies for the vehicle fleet, city facilities, and city programs that promote sustainable practices. Water resources, solid waste, energy efficiency, renewable energy and fuel efficiency are among the topics discussed.**	**Continuous**

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Emission Reduction Projects	Entity	Status	Description	Schedule/Completion Dates
Energy Benchmarking Planning	City of Edmond	In Progress	Benchmarking and Analysis of energy use in City facilities **2015 Update: This year the City switched to new customer billing software for the utility database (CIS Infinity). Crystal reports are run inside the software where usage data can be obtained. As the City becomes more invested in future expansions of the utility software, there are expected to be even better options for energy analysis.**	Continuous
Energy Management Systems	City of Edmond	Ongoing	Energy Management Systems are a combination of building management and advanced software solutions to assist managing building functions in a more energy efficient way, and to provide demand response controls when situations within the power grid demand it. In 2005 these systems were installed for the Crosstimbers Municipal Complex, Animal Welfare, and Fire Station V. In 2008 this system was installed for the Edmond Historical Museum. Again in May and June, 2011, through the EECBG, eleven additional facilities had these systems installed for HVAC and lighting controls. On the newer installations the average savings have been around 23%. **2015 Update: Savings are evident for facilities using Energy Management Systems. This is a consideration for all facilities.**	Continuous
Equipment Replacements and Retrofits	City of Edmond	Ongoing	Provide HVAC equipment in buildings that have older, less efficient, heating equipment and no cooling equipment. Installation of LED lighting at all new Water/Wastewater Facilities. Provide for the most efficient use of electric power when operating bedrock groundwater wells by designing pumps and motors specific to each well site's water pumping volumes thus reducing electric power cost. **2015 Update: New Design practices were developed for all new Water Resource Facilities. These practices include LED lighting for all projects indoor/outdoor – International Dark Sky Association (IDA) compliant outdoor lighting. Also, geothermal HVAC will be used. To minimize heat island effects, roofing/paving materials with a high reflectivity index will be used (concrete also has a much better life cycle cost). Renewable power is used at all Water Resource facilities, utilizing 100% wind power. Pumps and equipment are selected based on life cycle costs, including energy consumption during the anticipated life.**	Continuous
Geothermal Installation	City of Edmond	Complete	The new Mitch Park YMCA and Edmond Public Schools Competive Pool has installed 300 geothermal wells, and is expected to save an estimated 50% on energy operating costs. The new Public Safety Center, which will house the Edmond Police Department, Public Safety Communications, and Emergency Management functions, is having 140 geothermal wells installed, which is expected to save $12K - $15K per year in heating and cooling. **2015 Update: Geothermal wells have been installed for the new Public Safety Center. However, the facility is not yet open. These facilities will continue to be monitored for performance.**	2014 - 2016

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Green Power Community Designation	City of Edmond	Ongoing	The City of Edmond became the first municipality in Oklahoma to receive Green Power Community designation from the U.S. Environmental Protection Agency through their use of renewable energy. With overall use of more than 96 million kilowatt-hours of green power per year, close to 75% of the City of Edmond's facilities are powered by wind energy technology and 11% of residents and businesses in Edmond opt to use green power as a portion of their electricity via the Oklahoma Municipal Power Authority. Geothermal energy is utilized to power a new YMCA facility as well as a forthcoming, 70,000 square foot public safety center. These forms of energy reduce the use of power generated from fossil-fuel combustion. **2015 Update: The City keeps this designation for the third year. According to the program the City is ranked 25th in the country, based on the percentage of green power used.**	2014+
ITS Engineering	City of Edmond	In Progress	Intelligent Transportation Systems (ITS) are being installed at signalized intersections. This is a phased project and will be completed as funding becomes available. ITS should facilitate the management of traffic during congested periods, allowing better mobility and resulting in less idle time. **2015 Update: ITS has been installed at several intersections, in particular those with heavier traffic. The City Traffic Engineers will continue to monitor. This will be ongoing.**	Continuous
Open Streets Edmond	City of Edmond	Ongoing	On November 3rd, 2013, the City of Edmond held Oklahoma's first Open Streets event, closing off a stretch of University Drive near the University of Central Oklahoma campus to celebrate the opening of Edmond's first bike lane. From 2PM to 4PM University Drive was closed to vehicular traffic to allow for pedestrians and bicyclists to participate along with a series of activities and local vendors. The City of Edmond will now hold this event annually to help promote bicycling as a form of transportation. **2015 Update: This event was missed in 2014, but a subcommittee has been designated by the Edmond Bicycle Committee to plan for this in 2015.**	Continuous

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Emission Reduction Projects	Entity	Status	Description	Schedule/Completion Dates
Renewable Energy - Edmond Electric	City of Edmond	Ongoing	Renewable Energy Program: Sale of the available wind power to Edmond Electric customers. Free residential and commercial energy audits for Edmond Electric customers. Customer Rebates and Financing: Edmond Electric offers rebates to customers for the purchase of geothermal and energy efficient HVAC. Customers of Edmond Electric can finance the installation of a ground source loop to support a ground source heat pump system through Edmond Electric. Customer Outreach: Powerlines is an outreach newsletter on energy efficiency for key accounts. Equipment and operations: Utilize high efficiency transformers to reduce energy losses. Investigation of the cost and impact of converting electric and water use meters to electronic read and data capture systems. (AMR/AMI) **2015 Update: Currently the City is not accepting new applications for the wind power program. However, accounts wanting to switch to Pure and Simple wind power will be opened again in the future. The date is yet undetermined.**	Continuous
Urban Forestry	**City of Edmond**	**Ongoing**	**Urban Forestry, a division of Community Image, is involved in multiple tree plantings and tree distributions each year. Row plantings have been the majority of plantings by the City. In 2015 there have been four tree distributions. This is the first year that strides were taken to make these events a priority, rather than waiting until donated trees were available. Trees continually reduce concentrations of air pollutants, including ozone. Urban Forestry is also marketing information about trees in there distributions with "tree tags", which include descriptions of the air quality benefits.**	**Continuous**
CNG and Alternative fuel use	City of Norman	Ongoing	The City of Norman operates 30 light-duty CNG pickups and sedans, and three heavy duty CNG refuse haulers. In 2012, the city installed both fast-fill and time-fill fueling facilities to serve its growing fleet of natural gas-powered vehicles. Norman also has an idle reduction policy currently applied to approximately 90 of its heavy duty vehicles that reduces engine idling by up to 90 minutes per day per vehicle and saves up to 0.75 gallons of fuel per day per vehicle. **2015 Update: Norman added 2 light duty and 3 heavy duty CNG vehicles and 2 hybrid electric vehicles. They also programmed into vehicle's onboard computer to limit idle time to 5 minutes in 56 refuse haulers.**	Continuous
CNG and Alternative fuel use	City of Oklahoma City	Ongoing	The City of Oklahoma City operates a fleet of 97 heavy duty and light duty natural gas vehicles, 18 hybrid vehicles including one hybrid-diesel transit bus, and 498 heavy duty diesel trucks fueled with B20. These advanced technology vehicles and alternative fuels were responsible for reducing petroleum consumption in the Oklahoma City fleet by 154,852 gasoline gallon equivalents in 2012. **2015 Update: The City of Oklahoma City operates a fleet of 179 light and heavy duty CNG vehicles, 6 electric cars, 17 hybrid vehicles and 498 heavy duty diesel trucks using B20 as of today in the City-wide fleet. For fiscal year end 2014, the city's Office of Management and Budget reports 273,660 gallons of B20 and 81,649 gallons of CNG used in lieu of gasoline.**	Continuous

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Emission Reduction Projects	Entity	Status	Description	Schedule/Completion Dates
Energy Efficiency and Conservation Strategy	City of Oklahoma City	Complete	The City of Oklahoma City received a $5,482,300 formula grant through the Department of Energy's Energy Efficiency and Conservation Block Grant program, to develop an EECS. Programs listed in strategy include: sustainability plan, energy audits and upgrades of city facilities, lighting and energy management system upgrades of city facilities, revolving loan fund for homeowners to make energy efficiency upgrades, downtown recycling receptacles, downtown and ward 4 drop-off recycling centers, compressed natural gas fast-fill fueling station, review and recommendations to increase energy efficiency standards in the city's building code and historic preservation guidelines, downtown bike-share program, and public outreach and education.	April 2010 - 2015
MAPS 3 Modern Streetcar	City of Oklahoma City	Ongoing	$130 million from Oklahoma City's MAPs 3 program has been designated for the construction of a rail-based streetcar serving the downtown vicinity. This will reduce downtown congestion and provide more public transport options for the citizens of Oklahoma City. Construction of five to six miles of track is anticipated; however the ultimate number of miles of track constructed will be determined by available construction dollars. The project will also include infrastructure to connect other rail-based systems and/or a multi-modal transit hub. The first phase of procurement/construction, scheduled to begin mid-2014, will complete an initial loop, a maintenance facility and other transit infrastructure as appropriate, such as connections to other rail-based systems and/or a transit hub. The second phase, scheduled to begin mid-2017, will complete as many additional route miles as the remaining available construction dollars allow. **2015 Update:** • **City Council approved a consultant-recommended route framework** • **Santa Fe Railroad station was acquired for use as an Intermodal Transit Hub** • **Federal funding was announced for renovation of Santa Fe Railroad station** • **Architecture/Engineering consultant selection is underway for the hub renovation** • **Consultants recommended a site for the streetcar maintenance facility** • **Preliminary engineering design is underway**	2014-2018
Additional Energy Efficiency Project	City of Oklahoma City Downtown OKC, Inc. DEQ	New	**The City of Oklahoma City has installed a total of 9 solar-powered trash compactors, called "Big Bellies", in and near the downtown area. Each new Big Belly has one opening for trash, and its solar-powered compactor allows it to hold up to five times as much as a trash can of similar size. The Big Belly's other opening is for recycling paper, plastic, aluminum and glass. The Big Bellies also have a wireless network that alerts maintenance staff when they are at or approaching capacity.**	Continuous

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Emission Reduction Projects	Entity	Status	Description	Schedule/Completion Dates
CNG and Alternative fuel use	Cleveland Area Rapid Transit (CART) - University of Oklahoma	Ongoing	The University of Oklahoma currently has 154 on-road vehicles fueled by alternative energy sources including 90 flex-fuel sedans and SUVs fueled with E85; 14 light-duty sedans fueled with CNG; 20 Cleveland Area Rapid Transit buses fueled with B20; 14 heavy-duty natural gas buses and shuttles fueled with CNG; 3 fuel-efficient hybrid-electric cars; and 13 low-speed electric vehicles. Additionally, the university operates a fleet of off-road electric utility carts and golf carts used on campus by mail delivery, maintenance and physical plant staff. In 2014 CART reported 22 buses fueled with B20; 15 heavy-duty natural gas buses fueled with CNG; CART continues to replace its biodiesel buses with CNG fueled vehicles. **2015 Update: The University of Oklahoma currently has over 150 on-road vehicles fueled by alternative energy sources including 90 flex-fuel sedans and SUVs fueled with E85; 14 light-duty sedans fueled with CNG; 17 Cleveland Area Rapid Transit buses fueled with B20; 21 heavy-duty natural gas buses and shuttles fueled with CNG; 3 fuel-efficient hybrid electric cars; and 13 low-speed electric vehicles.**	
Free fares on Ozone Alert Days	Cleveland Area Rapid Transit (CART) - University of Oklahoma	Ongoing	On Ozone Alert Days, CART provides free transportation on all fixed route and paratransit buses serving the University of Oklahoma and the City of Norman, excluding express commuter service to Oklahoma City. **In June 2015, CART is participating in a "Dump The Pump" program, providing free bus fare and tshirts to participants, in order to encourage increased transit usage.**	**During Ozone season**
CNG Fleet Addition	DEQ	Ongoing	DEQ has plans to replace up to 12 gasoline fueled vehicles with CNG fueled vehicles on a rolling basis. These will be distributed around the state with at least 4 located in Oklahoma City. **2015 update: Fleet currently includes 2 CNG vehicles and 10 bi-fuel trucks.**	Continuous
Air Quality Public Outreach	DEQ	Ongoing	**The Department participates in multiple public outreach and education programs, which emphasize the importance of informing individuals about the effects of ozone on citizens' health. This includes producing/supplying ozone education materials, creating online videos encouraging energy efficiency and issuing ozone watches for the Oklahoma City MSA. DEQ began its Air Quality Health Advisory Program in 2006, issuing real time email notifications of unhealthy concentrations of ozone. In 2014 the Air Quality Division added an infographics gallery featuring original infographics with a local focus on the relationship between air quality and weather.**	**Continuous**
Lawnmower Exchange Program	DEQ	Ongoing	Citizens of the Oklahoma City MSA can exchange their old gas-powered lawn mower for a cash waiver toward the purchase of a new electric lawn mower. In 2013, 97 gas-powered mowers were traded in for recycling, and 80 new electric mowers were purchased with vouchers. Emissions reductions estimated to be approximately 66lbs of NOx, 50lbs of PM, 18,158lbs of CO and 2715lbs of HC. **Two exchange events were held in the spring of 2015, with over half of the 100 vouchers available being distributed in exchange for recycled gas mowers. one or more additional events are planned for the summer of 2015.**	2013 - Ongoing

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Oil & Gas Permit By Rule	DEQ	Complete	DEQ has updated its permitting rules (OAR 252:100-7) to include an Oil and Gas permit by rule (O&NG PBR). The main purpose of this rule is to streamline the permitting process for these numerous small sources and reduce associated permitting fees; however, this measure will also provide better emissions data about the oil and natural gas sector which could be used to develop future control strategies. The Department has registered 2,907 O&NG facilities under the PBR, of which 222 were conversions from the Area Source NESHAP and Small NSPS facilities General Permit (GP), 798 were conversions from the Oil and Gas GP and 19 were conversions from individual permits. From those numbers, there are 1868 facilities previously unpermitted that were permitted under the O&NG PBR.	Effective October 2013
Open Burning Rule	DEQ	Ongoing	This rule is expected to reduce PM, VOC and NOx emissions within the Oklahoma City and Tulsa Metropolitan Statistical Areas (MSAs) by requiring the use of an air curtain incinerator in place of open burning. This will significantly reduce the amount of ozone precursors generated by the burning of wood waste, with an approximate 90% reduction in total air pollutants. Additionally, this rule will prohibit open burning of waste in areas for which an ozone or PM Alert is in effect. In 2014, DEQ performed outreach to fire departments in the OKC and Tulsa Metropolitan areas to explain the rule. These fire departments are now assisting in enforcement of this rule, and as a result, many land clearing operations that would have just piled and burned in years past are either using an ACI, chipping, or having the waste removed from their property.	Effective July 2013
Village Green Park Benches	DEQ	New/Planned	The DEQ plans to install two Village Green Benches in Summer 2015, one at the Myriad Children's Garden (funded by an EPA grant) and one (still in planning stages) at the University of Oklahoma in Norman, which will be funded entirely by the DEQ. Both benches will be equipped with instruments to measure ozone, fine particulate matter and critical weather parameters. The components will transmit real-time data to the DEQ and to the Village Green website. The project is solar powered and tests the viability of monitoring air pollution in real life work-and-play environments using portable technology. The goal of the project is to provide the public and communities with information previously not available about their local air quality and engage communities in air pollution awareness.	2015
Weather Festival	National Weather Center, Norman	Ongoing	The annual weather festival showcases the many weather related organizations and activities in central Oklahoma. This event features weather balloon launches, storm research vehicle displays, children's activities, amateur radio demonstrations and weather related information and products. The Air Quality Division is responsible for presentation space showcasing the division's programs and the air quality themed children's activity room.	2008 - Present
Solar Energy Pilot Projects	OGE Energy Corp.	In Progress	In 2014, Oklahoma Gas and Electric (OG&E) launched a solar energy pilot project to test the deployment and operation of solar power on grid safety, maintenance, and reliability. Rooftop solar panels and battery storage facilities have been installed at several OG&E locations, and two community solar farms will be developed at OG&E's Mustang Power Plant in 2015. The solar farms will have a generating capacity of 2.5 MW which is roughly the equivalent of powering 500 homes.	To be determined.

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Emission Reduction Projects	Entity	Status	Description	Schedule/Completion Dates
Electric Vehicle Fleet	OGE Energy Corp.	Ongoing	OG&E encourages the adoption of electric vehicles (EVs) and is continuing to transition its passenger car fleet by adding 10 new EVs in 2015. In addition, the company is installing charging stations in several of its facilities in the metro OKC area so employees can conveniently charge their vehicles.	Continuous
OG&E Energy Efficiency Programs-Residential	OGE Energy Corp.	Ongoing	**Oklahoma Gas and Electric Company (OG&E) has the most widespread Smart Grid technology in the country, which offers variable pricing through their Smart Hours program.** 2015 Update: OG&E offers the following energy efficiency programs targeting Residential Customers: HEEP—a free on-line energy audit, free A/C tune-up, duct inspection and plenum seal and ceiling insulation rebate; in 2014 OG&E provided services to 11,717 customers saving 28,988,770 kWh. Weatherization—free energy efficiency improvements for lower-income customers which includes ceiling insulation, general air infiltration improvements, CFL lighting installations and performance testing; in 2014 3,065 homes were weatherized saving customers 10,445,946 kWh. Geothermal Rebates—rebates for the installation of geothermal HVAC systems; in 2014 OG&E provided services to 325 customers saving 1,537,497 kWh. Positive Energy Home—rebates, inspections and strict construction standards for new homes; in 2014 OG&E provided services to 1,200 homes saving 2,153,932 kWh.	These programs will run from 2013 through 2015
OG&E Energy Efficiency Programs-Commercial	**OGE Energy Corp.**	Ongoing	Systemwide, OG&E currently projects energy efficiency and demand reductions of up to 549 MW and 1,130 MWh through 2024. OG&E offers the following energy efficiency programs targeting Commercial and Industrial Customers: **Commercial Lighting Rebates**—rebates for lighting and lighting control improvements; in 2014 OG&E provided rebates to 713 customers saving 27,607,405 kWh. **Commercial Energy Efficiency Program (CEEP)**—rebates for efficiency improvements for more efficient motors, HVAC systems and Chillers; in 2014 OG&E provided rebates to 363 customers saving 10,791,427 kWh. **Industrial Energy Efficiency Program (IEEP)**—rebates for efficiency improvements for more efficient motors, HVAC systems and Chillers; in 2014 OG&E provided rebates to 14 customers saving 662,610 kWh.	These programs will run from 2013 through 2016
Paperless Billing	**OGE Energy Corp.**	**Ongoing**	OG&E promotes paperless billing to reduce the number of electric bills that must be mailed. Customer Participation: 2012 - 36,882, 2013 - 38,038, 2014 – 48,048.	Continuous
OG&E Wind Power	**OGE Energy Corp.**	**Ongoing**	OG&E has 7 Wind farms providing 841 MW of Wind Power to the company, which accounts for approximately 10% of OG&E's generating capacity (MW) and approximately 15% of Oklahoma's power generation (MWh).	Continuous

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Emission Reduction Projects	Entity	Status	Description	Schedule/Completion Dates
CNG Fleet Addition	Oklahoma Department of Transportation (ODOT) / Oklahoma Turnpike Authority (OTA)	In Progress	**2015 update: In the past 3 years, ODOT has replaced 675 of its approximately 1190 light duty vehicle fleet with CNG vehicles. The agency is working toward its goal of 90 percent CNG by the end of 2016. The projected savings realized could be as much as $20,000 over the useful life of each vehicle. OTA currently has 75 CNG fleet vehicles and 8 CNG pool vehicles. Plans are to add another 34 CNG fleet vehicles and 6 pool vehicles this fiscal year, which will bring the total percentage CNG to 75%.**	2013-2016
ScienceFest Oklahoma	Oklahoma DEQ OGE Energy Corp Oklahoma Department of Commerce Oklahoma Secretary of Energy and Environment	Ongoing	**ScienceFest Oklahoma is an annual education event which brings 2500-5000 4th and 5th grade students to Oklahoma City each spring. ScienceFest is a day-long outing for Oklahoma school children that provides hands-on learning activities focused on the environment, conserving natural resources, and using alternative fuels and technologies.**	2002 - Present
Rebate for CNG Vehicles and Home Fueling products	Oklahoma Natural Gas	Ongoing	Currently offering rebates of $1,000 for the purchase of a dedicated CNG vehicle, $500 for the purchase of a bi-fueled vehicle and $1,000 for the purchase of a residential home-fueling system. The program is expected to continue, with no set cut-off or termination date. In 2013, ONG processed 431 Natural Gas Vehicle (NGV) rebates, 370 bi-fuel NGV rebates, and 37 home refueling rebates. **2015 update: In 2014, ONG processed 248 total NGV rebates, which included 158 bi-fuel NGV rebates, 70 dedicated NGV rebates, and 20 home refueling rebates.**	Continuous
Alternative Fuel Vehicle (AFV) Tax Credit	State of Oklahoma	Ongoing	For tax years beginning before January 1, 2015, a one-time income tax credit is available for 50% of the incremental cost of a new AFV or converting a vehicle to operate on an alternative fuel. The state also provides a tax credit for 10% of the total vehicle cost, up to $1,500, if the incremental cost of a new AFV cannot be determined or when an AFV is resold, as long as a tax credit has not been previously taken on the vehicle. Equipment used for conversions must be new. The alternative fuels eligible for the credit are compressed natural gas, liquefied natural gas, hydrogen, and liquefied petroleum gas (propane). Tax credits may be carried forward for up to five years. (68 O.S. §2357.22)	1990-Present
Alternative Fueling Infrastructure Tax Credit	State of Oklahoma	Complete	For tax years beginning before January 1, 2015, a tax credit is available for up to 75% of the cost of alternative fueling infrastructure. Eligible alternative fuels include CNG, liquefied natural gas, liquefied petroleum gas (propane), hydrogen, and electricity. The infrastructure must be new. A tax credit is also available for up to 50% of the cost of installing a residential CNG fueling system, for up to $2,500. The tax credit may be carried forward for up to five years. (68 O.S. §2357.22)	2014
Oklahoma First Energy Plan	State of Oklahoma	Ongoing	Oklahoma First Energy Plan lays out policy guidance for a diverse energy portfolio that includes energy efficiency and encourages efficiency technologies such as Combined Heat and Power (CHP) and geothermal.	2011- Present
Oklahoma State Facilities Energy Conservation Program	State of Oklahoma	Ongoing	During the 2012 legislative session, Oklahoma lawmakers passed SB 1096, which created a conservation program. The law includes a provision that sets forth a goal to target a cumulative energy savings of not less than 20% by the year 2020, when compared with 2012 utility expenditures (27A O.S., §3-4-106.1)	2012-onward

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Emission Reduction Projects	Entity	Status	Description	Schedule/Completion Dates
Oklahoma State Mandated Energy Efficiency Requirements	State of Oklahoma	Ongoing	61 O.S. § 213, Enacted 6/3/2008, requires the state to develop a high-performance building certification program for state construction and renovation projects; program must meet the certification guidelines of either the LEED system or the Green Globes rating system. The requirement applies to new construction or substantial renovation projects that begin the design phase after July 1, 2008 in buildings larger than 10,000 square feet. "Substantial renovations" is defined as projects that cost in excess of 50% of the value of the facility. In order to be considered a "state project" for purposes of the requirements, state funds or state-insured funds must constitute at least 50% of the project cost. State agencies are directed to meet the highest level of certification attainable under a payback period of 5 years or less. Public schools (K-12) and state archive buildings are exempted from the requirements.	2009 - Present
Private Alternative Fuel Vehicle (AFV) Loans	State of Oklahoma	Ongoing	Private loan program with a 3% interest rate for the cost of converting private fleets to operate on alternative fuels, for the cost of purchasing an original equipment manufacturer AFV, and for the installation of AFV fueling infrastructure. Maximum repayment period is six-years.	1990-Present
The Oklahoma Energy Security Act	State of Oklahoma	Ongoing	Established state wide goals (O.S. 17, Section 801.1 et seq.) for alternative and domestically produced energy, including: 15% of energy from renewables by 2015, and CNG fueling stations every 100 miles by 2015 and every 50 miles by 2025.	Present - 2025
Emergency and Transportation Revolving Fund	State of Oklahoma	New	SB 656 (2015) allows counties to apply for no-interest loans, for a maximum of 5 years, for the purchase of CNG vehicles or the conversion of existing fleet vehicles to CNG.	2015- onward
Environmental Protection Agency College and University Green Power Challenge	University of Central Oklahoma	Ongoing	For the fourth consecutive year, the Environmental Protection Agency ranked the University of Central Oklahoma (UCO) first among schools in the Mid-American Intercollegiate Athletics Association and 23rd among 33 collegiate conferences and 78 schools overall. UCO uses 26 million kilowatt-hours of wind power annually and has on-site biodiesel productions.	February 2014
OU Spirit Wind Farm	University of Oklahoma	Complete	One hundred percent of the University of Oklahoma's Norman campus purchased electricity is renewable, as part of a 2008 agreement made with OG&E. Under the agreement, the per-kWh wind power premium OU pays to OG&E has substantially helped fund the 101 MW OU Spirit Wind Farm. The university has not seen a noticeable change in its electric bill since switching to renewables and expects the use of wind power will help it overcome any future spikes in energy prices. The university is currently ranked 1st in the Big 12 and 6th in the country for campus wind power use.	February 2013