



**CITY OF PLANO  
COUNCIL AGENDA ITEM**

<b>CITY SECRETARY'S USE ONLY</b>	
<input type="checkbox"/> Consent	<input type="checkbox"/> Regular <input type="checkbox"/> Statutory
Council Meeting Date:	08/08/2011
Department:	Police Department
Department Head	Gregory W. Rushin
Agenda Coordinator (include phone #): <b>Pam Haines, ext 2538</b>	

**CAPTION**

A Resolution of the City Council of the City of Plano, Texas, approving the terms and conditions of an Interlocal Cooperation Agreement by and between the City of Plano and Collin County for the implementation of Idle Reduction Technology for law enforcement vehicles; authorizing its execution by the City Manager or his authorized designee; and providing an effective date.

**FINANCIAL SUMMARY**

NOT APPLICABLE       OPERATING EXPENSE       REVENUE       CIP

FISCAL YEAR:	2010-11, 2011-12	Prior Year (CIP Only)	Current Year	Future Years	TOTALS
Budget		0	0	982,800	<b>982,800</b>
Encumbered/Expended Amount		0	0	0	<b>0</b>
This Item		0	0	-982,800	<b>-982,800</b>
BALANCE		0	0	0	<b>0</b>

**FUND(S):    GENERAL FUND, \$444,375; CRIMINAL INVESTIGATION FUND, \$60,885; LIP GRANT FUNDS \$477,540**

**COMMENTS:** This item is a shared initiative between Collin County and the City of Plano. Collin County is providing the City of Plano with funds for the purchase of Idle Reduction Technology equipment, while the City will provide installation, maintenance and repairs. Funds are included in the City Manager's 2011-12 Recommended Budget for the Police Department and Criminal Investigation Operations. This item, in the amount of \$505,260 (City Match, \$429,000, installation, \$60,885, and maintenance \$15,375) has no fiscal impact. The City Match, estimated at \$429,000, reflects salaries and benefits of the Police Officers who drive the vehicles to be equipped with the Idle Reduction Technology in their regular line of duty and those costs are already included in the 2011-12 Recommended Budget. The cost of the equipment, estimated at \$477,540, will be reimbursed to the City by the LIP Funds from Collin County.

**STRATEGIC PLAN GOAL:** Shared initiatives to promote better air quality relate to the City's goals of Financially Strong City with Service Excellence; Safe, Large City; and Partnering for Community Benefit.

**SUMMARY OF ITEM**

A Resolution approving the terms and conditions of an Interlocal Cooperation Agreement by and between the City of Plano and Collin County concerning the implementation of Idle Reduction Technology for law enforcement vehicles.



**CITY OF PLANO  
COUNCIL AGENDA ITEM**

List of Supporting Documents: Resolution, Memo, Exhibit "A"	Other Departments, Boards, Commissions or Agencies



P.O. Box 860358  
Plano, Texas 75086-0358  
972-941-7000  
Fax. No. 972-941-0099  
<http://www.ci.plano.tx.us>

## **MEMORANDUM**

**Date:** July 28, 2011  
**To:** Gregory W. Rushin, Chief of Police  
**From:** Ed Drain, Assistant Chief (E)   
**Subject:** Interlocal Agreement - Air Quality Local Initiative Project Proposal

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The purpose of the attached inter-local agreement (ILA) is for the Police Department to participate in a Local Initiative Project (LIP) with Collin County to reduce air emissions from Police Department patrol vehicles. Collin County is in a "non-attainment" area for meeting federal ozone standards. Counties located in non-attainment areas are eligible for LIP funds administered by the Texas Commission on Environmental Quality (TCEQ) to improve air quality in their jurisdictions.

Collin County previously used LIP funds to purchase low-emission vehicles. During the 81<sup>st</sup> Texas Legislature, lawmakers discontinued the use of LIP funds for vehicle purchases. Collin County currently has LIP funds available for 2009, 2010, and 2011 fiscal years. Collin County has indicated a willingness to allow law enforcement agencies within the County to use these funds to improve air quality by either (1) establishing an enforcement program to reduce fraudulent state vehicle inspection stickers, or (2) to implement idle reduction technology in law enforcement vehicles. Based on a review of TCEQ data for inspection stations in Plano and Collin County, we determined that implementing an inspection sticker enforcement program was not a Police Department priority and that using LIP funds for idle reduction technology would be a better use of this resource.

The attached ILA provides that the City of Plano will submit an Idle Reduction Project Proposal for approval by the Collin County Commissioners Court to receive a portion of Collin County's 2010 LIP funds. TCEQ requires that jurisdictions provide at least a dollar for dollar match to receive LIP funds for idle reduction technology. Salaries of officers driving vehicles equipped with idle reduction technology, and the cost for installing the equipment, contributes toward the funding match as in-kind services. TCEQ also requires that 25% of the vehicles that receive idle reduction systems using LIP funds must include a data collection system capable of quantitatively measuring and generating reports on the carbon dioxide and nitrogen oxide reductions and associated fuel savings related to the technology. TCEQ requires that we provide reports from these data collection systems to their agency quarterly.

The cost of each idle reduction unit is approximately \$3,500, and \$1,325 for each data collection unit. The project proposal provides for Plano to receive \$477,540 in LIP funds to purchase approximately 123 idle reduction units for patrol vehicles and 29 data collection units. Plano will provide \$330,000 in in-kind services based on salaries, and \$99,000 based on fringe benefits of officers driving vehicles with idle reduction systems

installed. The salaries and fringe benefits are calculated over a 50-week period for officers working during their regular scheduled duty time. The project proposal also provides for Plano to provide \$76,260 in “hard cash” matching funds. Plano’s total in-kind services and hard cash match is \$505,260 for this project. If this proposal is approved, the hard cash matching funds will consist of \$60,885 for installation costs, using Police Department 12.535 – Seizure Fund. The remaining \$15,375 cash match will be covered in the Police Department’s 532—General Fund, for maintenance costs for the data collection units.

	LIP Funds	In-Kind Service Match	Hard Cash Match	Totals
Idle Reduction Units	\$454,485			\$454,485
Installation Cost			\$60,885	\$60,885
Data Collection Units	\$23,055		\$15,375	\$38,430
Salaries		\$330,000		\$330,000
Fringe Benefits		\$99,000		\$99,000
<b>Totals</b>	<b>\$477,540</b>	<b>\$429,000</b>	<b>\$76,260</b>	<b>\$982,800</b>

We may realize the following benefits by implementing this project:

- Reduction in patrol fleet emissions
- Reduction in patrol fleet fuel cost
- Reduction in patrol vehicle battery replacement cost
- Improvements in patrol vehicles power management

The idle reduction technology under consideration is capable of running all equipment in a typical patrol vehicle, except for the air conditioning and heating systems, without the vehicle’s engine running. Equipment that can be operated with the engine off includes the emergency and standard lights, mobile radios, mobile computer systems, digital video recorders, radar units, license plate recognition systems, thermal imaging systems and Lo-jack receivers. With idle reduction systems installed, officers sitting in their vehicles while the vehicle is parked will oftentimes still need to keep their engine running during the summer and winter months when air conditioning and heating are needed. However, there are incidents that occur daily, such as traffic crashes, when officers must keep their vehicles running to power emergency lights, digital video recorders, and other equipment, while working outside their vehicles. These are opportunities where officers can turn-off their engines and operate their equipment without draining their vehicles’ batteries, and where we can expect reductions in emissions released into the environment and reductions in fuel usage.

The assortment of electronic equipment installed in our patrol vehicles has resulted in power management issues that cause some equipment, in particular computers and

digital video recorders, to turn off automatically while the vehicles are in service. This occurs because some equipment is designed to sense when the vehicle's power is running low and the equipment shuts down to prevent the vehicle's battery from going dead. When this happens, officers must "re-boot" the equipment which can take several minutes. Generally, this is merely irritating when officers are not responding to calls for service, but it can be a significant problem when it occurs as officers are responding to calls and must wait for their computer to reboot before they can review information about their call.

Most ancillary electrical equipment installed in patrol vehicles continue to have a slight current draw on the battery when the equipment is turned off and the vehicle is not in service. This is referred to as a "parasitic current draw". In some cases, this parasitic current draw can drain the vehicle's battery if the vehicle is not driven. As a result, it is not uncommon for officers to have to jump start their vehicles before putting them into service when the vehicles have not been driven for periods as short as one or two days. Again, this is a minor problem if officers are not immediately required to respond to calls, but it's a more significant issue when calls are holding as officers complete shift briefings.

Equipment Services has worked diligently to address the power management issues, but they are difficult problems to resolve because some vehicles rarely have power management problems, while others of the same make and model year and outfitted with similar equipment habitually have problems with equipment shutting down or the battery going dead. The most common fix is to replace the batteries more frequently in vehicles that continually have power management problems. Frequent battery replacement adds to maintenance cost and down time. Equipment Services Fleet Manager Reid Choate agrees that installation of idle reduction systems, which serve as an alternate power source, may significantly alleviate these problems.

We currently have one patrol vehicle that has an idle reduction unit installed. This unit does not have data collection capabilities installed however, and we cannot practically evaluate the emission reductions. We have determined that the idle reduction unit does serve as an effective alternate power source for addressing the power management issues discussed above. An especially beneficial and time saving feature is that if a vehicle's battery does go dead, it can be jump started by the officer directly from the idle reduction unit. Other agencies such as Austin Police Department, Denton Police Department, and Dallas Police Department have also reported improvements in addressing power management issues in their patrol fleet by installing idle reduction systems.

If this project is approved, we will be able to install idle reduction systems in about 95% of our patrol fleet. We will implement a written policy that delineates situations where vehicles should be turned off and the alternate power supply system used to power the vehicles' equipment. With the data collection systems installed, and other evaluative processes available, we will be able to determine quantitatively and qualitatively the benefits of this project in terms of reduced emissions, reduced fuel usage, and improved power management, and further determine if this is a program we should continue going forward.

**A Resolution of the City Council of the City of Plano, Texas, approving the terms and conditions of an Interlocal Cooperation Agreement by and between the City of Plano and Collin County for the implementation of Idle Reduction Technology for law enforcement vehicles; authorizing its execution by the City Manager or his authorized designee; and providing an effective date.**

**WHEREAS**, the Interlocal Cooperation Act, Chapter 791 of the Texas Government Code, authorizes governmental entities to contract with each other to perform governmental functions and services under the terms thereof; and

**WHEREAS**, the City Council has been presented a proposed Interlocal Cooperation Agreement by and between City of Plano and Collin County, a substantial copy of which is attached hereto as Exhibit "A" and incorporated herein by reference (hereinafter called "Agreement"); and

**WHEREAS**, upon full review and consideration of the Agreement, and all matters attendant and related thereto, the City Council is of the opinion that the terms and conditions thereof should be approved, and that the City Manager or his designee to execute it on behalf of the City of Plano.

**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF PLANO, TEXAS, THAT:**

**Section I.** The terms and conditions of the Agreement, having been reviewed by the City Council of the City of Plano and found to be acceptable and in the best interest of the City of Plano and its citizens, are hereby in all things approved.

**Section II.** The City Manager or his authorized designee is hereby authorized to execute the Agreement and all other documents in connection therewith on behalf of the City of Plano, substantially according to the terms and conditions set forth in the Agreement.

**Section III.** This Resolution shall become effective immediately upon its passage.

**DULY PASSED AND APPROVED** this the 8th day of August, 2011.

\_\_\_\_\_  
Phil Dyer, MAYOR

ATTEST:

\_\_\_\_\_  
Diane Zucco, CITY SECRETARY

APPROVED AS TO FORM:

\_\_\_\_\_  
Diane C. Wetherbee, CITY ATTORNEY

**INTERLOCAL AGREEMENT  
BETWEEN  
COLLIN COUNTY  
AND THE  
CITY OF PLANO**

**WHEREAS**, the County of Collin, Texas (“County”) and the City of Plano (“City”) desire to enter into an agreement concerning the use of the County’s Local Initiative Project funding to purchase Idle Reduction Technology for law enforcement vehicles to improve air quality in the North Central Texas Region; and

**WHEREAS**, the Interlocal Cooperation Act (Texas Government Code Chapter 791) authorizes any local government to contract with one or more local government to perform governmental functions and services under the terms of the Act; and

**WHEREAS**, the Dallas-Fort Worth (DFW) region is in non-attainment of the federal air quality standards and the County is actively involved in the implementation of projects outlined in the State Implementation Plan (SIP) for air quality such as the Idle Reduction program listed as part of the Weight of Evidence Section of the DFW SIP; and

**WHEREAS**, the Texas Commission on Environmental Quality (TCEQ) was authorized to implement the Local Initiative Projects outlined in Senate Bill 12, passed by the 80<sup>th</sup> Texas Legislature and fund the programs annually up to five million dollars statewide with funds collected for the AirCheck Texas Drive a Clean Machine Program (formerly known as the Low Income Repair and Replacement Assistance Program or LIRAP); and

**WHEREAS**, Collin County’s share of these funds is \$34,153 for fiscal year 2009, \$279,726 for fiscal year 2010 and \$195,062 for fiscal year 2011; and

**WHEREAS**, the County agrees to provide the City funding from the County’s Local Initiative Project in the amount of \$477,540 if City agrees to provide matching and in-kind services in the amount of \$505,260 for the City’s Idle Reduction Technology program; and

**WHEREAS**, the City and the County find that this agreement will benefit the residents of the North Central Texas Region, by reducing idling emissions from law enforcement vehicles; and

**WHEREAS**, the City and County have determined purchasing the Idle Reduction Technology may be executed most economically by implementing this agreement; and

**NOW, THEREFORE**, this agreement is made and entered into by the County and the City upon and for the mutual consideration stated herein.

**WITNESSETH:**

ARTICLE I.

The City shall arrange for the purchase of Idle Reduction Technology to be installed in City police vehicles, following TCEQ guidelines, hereinafter called the "Project". The Project consists of items described in Exhibit "A".

ARTICLE II.

The City shall prepare a Project Proposal per the TCEQ requirements and submit the completed proposal to Collin County for approval. Once approved by the County and the City, the County shall submit the signed Project Proposal to TCEQ for review. TCEQ will notify the County once the Project is approved and will issue a Notice to Proceed to the County. The County will then request Local Initiative Project funds from TCEQ and forward the agreed upon funds to the City for the purchase of idle reduction technology.

ARTICLE III.

The City shall prepare plans and specifications for the implementation and use of Idle Reduction Technology on designated police vehicles, accept bids, award a contract and administer the contract in accordance with all TCEQ and state statutory requirements. The City shall provide the County with a copy of executed purchase contract(s) for the project.

ARTICLE IV.

The City will not expend funds to acquire Idle Reduction Technology until TCEQ issues a Notice to Proceed for this Project to Collin County.

ARTICLE V.

The City estimates the total actual cost of the project to be \$982,800. The County agrees to fund a portion of the total cost of items described in Exhibit "A", using Local Initiative Project Funds, in an amount not to exceed \$477,540 and the City agrees to return to the County all funds not expended on the Project. Per TCEQ's matching requirement, the City will contribute \$505,260 in TCEQ approved in-kind match, i.e. the automotive technician's time to install units in vehicles, the salaries of officers utilizing Idle Reduction Technology, cash or through other match eligible operating and maintenance costs. All payments will be made from current revenues available to the paying party.

ARTICLE VI.

Collin County's participation in this project shall not exceed \$477,540 as indicated in Article V. above. The City shall be responsible for any costs, which exceed the total estimated project cost.

ARTICLE VII.

The City shall also provide Quarterly Reports and Financial Status Reports, in electronic format or via US mail, to the TCEQ and County contact identified on Exhibit "A". Following completion of the project, the City shall provide an itemized final accounting of expenditures including in-kind services or donations for the project. All reporting will be done in compliance with TCEQ requirements.

ARTICLE VIII.

INDEMNIFICATION. To the extent allowed by law, each party agrees to release, defend, indemnify, and hold harmless the other (and its officers, agents, and employees) from and against all claims or causes of action for injuries (including death), property damages (including loss of use), and any other losses, demands, suits, judgements and costs, including reasonable attorneys' fees and expenses, in any way arising out of, related to, or resulting from its performance under this agreement, or caused by its negligent acts or omissions (or those of its respective officers, agents, employees, or any other third parties for whom it is legally responsible) in connection with performing this agreement.

ARTICLE IX.

VENUE. The laws of the State of Texas shall govern the interpretation, validity, performance and enforcement of this agreement. The parties agree that this agreement is performable in Collin County, Texas and that exclusive venue shall lie in Collin County, Texas.

ARTICLE X.

SEVERABILITY. The provisions of this agreement are severable. If any paragraph, section, subdivision, sentence, clause, or phrase of this agreement is for any reason held by a court of competent jurisdiction to be contrary to law or contrary to any rule or regulation having the force and effect of the law, the remaining portions of the agreement shall be enforced as if the invalid provision had never been included.

ARTICLE XI.

ENTIRE AGREEMENT. This agreement embodies the entire agreement between the parties and may only be modified in writing executed by both parties.

ARTICLE XII.

SUCCESSORS AND ASSIGNS. This agreement shall be binding upon the parties hereto, their successors, heirs, personal representatives and assigns. Neither party will assign or transfer an interest in this agreement without the written consent of the other party.

ARTICLE XIII.

IMMUNITY. It is expressly understood and agreed that, in the execution of this agreement, neither party waives, nor shall be deemed hereby to have waived any immunity or defense that would otherwise be available to it against claims arising in the exercise of governmental powers and functions. By entering into this agreement, the parties do not create any obligations, express or implied, other than those set forth herein, and this agreement shall not create any rights in parties not signatories hereto.

ARTICLE XIV.

TERM. This agreement shall be effective upon execution by both parties and shall continue in effect until the expiration of TCEQ's Notice to Proceed.

ARTICLE XV.

The declarations, determinations and findings declared, made and found in the preamble to this Agreement are hereby adopted, restated and made part of the operative provisions hereof.

**APPROVED AS TO FORM:**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

**COUNTY OF COLLIN, TEXAS**

By: \_\_\_\_\_  
Name: Keith Self  
Title: County Judge  
Date: \_\_\_\_\_

Executed on this \_\_\_\_ day of \_\_\_\_\_,  
2011, by the County of Collin,  
pursuant to Commissioners' Court  
Order No. \_\_\_\_\_.

**ATTEST:**

By: \_\_\_\_\_  
Name: Diane Zucco  
Title: City Secretary  
Date: \_\_\_\_\_

**CITY OF PLANO**

By: \_\_\_\_\_  
Name: Bruce D. Glasscock  
Title: City Manager  
Date: \_\_\_\_\_

Executed on behalf of the City of  
Plano pursuant to City  
Council Resolution No. \_\_\_\_\_

**APPROVED AS TO FORM:**

By: \_\_\_\_\_  
Name: Diane Wetherbee  
Title: City Attorney  
Date: \_\_\_\_\_

## EXHIBIT "A"

The County will provide Local Initiative Project funding assistance for the following:

- Idle Reduction Technology for Police Vehicles

**Total funding** **\$477,540. See Article VI.**

### Contact Information

Request for Local Initiative Project Funding submitted to:

Collin County  
Special Projects  
Jeff Durham  
825 N. McDonald Street, Suite 145  
McKinney, Texas 75069  
972-548-3723

Submission of electronic quarterly, financial status and year end reports:

Jeff Durham  
[jdurham@collincountytexas.gov](mailto:jdurham@collincountytexas.gov)

Mike Regan  
[Michael.Regan@tceq.state.texas.gov](mailto:Michael.Regan@tceq.state.texas.gov)

Submission of signed original copy of quarterly, financial status and year end reports:

Michael Regan  
Texas Commission on Environmental Quality  
Mobile Source Program Team  
Mail Code 164  
12100 Park 35 Circle  
Austin, Texas 78753  
512-239-2988

**Project Manager Contact:** (must be able to answer specific questions regarding project)

**Name:** Assistant Chief Ed Drain

**Address:** 909 14<sup>th</sup> Street

Plano, Texas 75074

**Phone:** 972-941-2412

**Email:** edd@plano.gov

**Texas Commission on Environmental Quality  
Air Quality Division**

**FY 2010/2011  
Local Initiative Projects**

**Project Proposal/Project Summary Forms  
June 2008**

## INSTRUCTIONS

This document provides the forms for use by the Counties in submitting local initiative projects for funding to the Texas Commission on Environmental Quality (TCEQ). These forms must be used by the County to submit projects to the TCEQ for review and acceptance.

### **Project Summary Form and Certification Form**

The forms should be used by the County to provide the TCEQ information on each project approved for funding by its governing body. The *Project Summary Form* outlines the format for the County to provide the TCEQ with the necessary information concerning each project selected. The *Project Summary Form* will serve as the project proposal, as required by Section IV: Project Approval of the contract with the TCEQ.

A *Certification Form* serves as written certification by the County that the projects were reviewed for eligibility and found to meet the minimum criteria. It must be submitted with the project summary forms. The County may submit a resolution from its governing body indicating the support for the projects selected, but a certification form must still be submitted with the project summary forms.

The project summaries and certification form should be provided to the TCEQ for all projects. If, at a later date, additional projects are proposed for funding, additional project summary forms and certification forms must be submitted. Changes to existing projects must also be documented on a revised project summary form and submitted to the TCEQ.

The TCEQ will review the project summaries and will notify the County in writing of any projects that the TCEQ determines may not meet project eligibility criteria under the terms of the grant agreement, or for which there may be a question about the project. The County is requested to respond to any request from the TCEQ for additional information concerning a project. The County may not proceed with funding a project until notified that it may do so by the TCEQ.

**FY 2010/2011 Local Initiative Projects  
Project Summary**

**County Certification**

Collin County makes the following certifications regarding the projects included with the accompanying Project Summaries:

1. The projects were selected in accordance with the procedures set forth in the grant agreement with Texas Commission on Environmental Quality (TCEQ);
2. The project proposals have been fully evaluated and determined to fit within the minimum criteria and standards established by TCEQ for this program, as well as more specific standards established for the project categories by the County;
3. The project proposals are consistent with and directly support implementation of the Texas Health and Safety Code, 382.220; and
4. The governing body of Collin County officially approved the selection of these projects on *{date}*.

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**Authorized Certifying Official**

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**Date**

**Typed/Printed Name and Title:** County Judge Keith Self

**FY 2010/2011 Local Initiative Projects  
Project Summary Form**

New     Revised

<b>County:</b> Collin	<b>Fiscal Year:</b> FY 2010 & FY 2011
<b>Date:</b> July 18, 2011	<b>Revision Date:</b>
<b>Contact Person and Phone Number:</b> Jeff Durham, 972-548-3723	

<b>Brief Project Title:</b> Idle Reduction Technology	<b>Total Grant Funding:</b> \$477,540
<b>Counties to be Served:</b> Collin	<b>Matching/In-Kind Services:</b> \$505,260
<b>Project Dates:</b> <b>Start Date:</b> Date Notice to Proceed Issued <b>End Date:</b> August 31, 2012	<b>If contracting with another entity, list name and contact person:</b> City of Plano, Assistant Police Chief Ed Drain. 972-941-2412

BUDGET CATEGORY	FUNDING AMOUNT	MATCHING/SOURCE
<b>Personnel / Salaries</b> <i>List personnel, # of hours, salary charged to grant</i> Installation of 123 Units @ \$495 each Officers time while utilizing the idle reduction technology 200 hours per week for 50 weeks @\$33.00 per hour		\$60,885  \$330,000
<b>Fringe Benefits</b>	N/A	\$99,000
<b>Travel</b> <i>List &amp; itemize travel expenditures</i>	N/A	N/A
<b>Supplies</b> <i>List &amp; itemize detailed travel expenditures</i>	N/A	N/A
<b>Equipment</b> <i>List &amp; itemize equipment expenditures (must have a unit cost of \$5,000 or more)</i> 123 Independence Package Idle Reduction units @ \$3,695 each 29 Data collection and reporting units @ \$795 each-1year Approximately \$125 per vehicle for maintenance 123 vehicles = 123@ \$125 per vehicle	\$454,485  \$23,055	\$15,375
<b>Construction</b> <i>List &amp; itemize construction expenditures</i>	N/A	N/A

<b>Indirect Charges (not to exceed 10%)</b>	N/A	N/A
<b>TOTAL FUNDING</b>	<b>\$477,540</b>	<b>\$505,260</b>

**In-Kind Match:**

The City of Plano will provide the in-kind matching requirement with the officer’s time while utilizing the idle reduction technology along with the associated fringe benefits. The City of Plano Police Department will adopt an alternative-power unit idling policy requiring vehicles with the equipment to shut-off the vehicle and use the alternative power unit during activities where use of the vehicle's equipment is not necessary. Such activities could include traffic control, traffic accident investigations, lunch breaks, and other activities where the law enforcement officer is required to be outside of the vehicle to perform the activity. Activities exempt from this policy will include those activities where idling is necessary to supply heat or air conditioning to ensure a law enforcement officer or a vehicle's occupant's health and safety while performing their duties. Vehicle Identification Numbers (VIN) will be provided to TCEQ when vehicles designated to be equipped with idle reduction technology are selected. Usage will be tracked by the data collection units installed on approximately 25% of the vehicles and VIN’s will be provided when the designated units are selected.

**Project Description:**

Studies show law enforcement vehicles spend from 2.4 hours (Travis County Sheriff’s Department) to 4.8 hours (Dallas Police Department) per day idling. When a vehicle idles, it emits harmful pollutants, carbon dioxide (CO<sub>2</sub>) and nitrogen oxide (NOx), into the air. Currently, the North Central Texas region is designated as nonattainment for NOx by the Environmental Protection Agency (EPA). Since the region did not meet the standard, and the EPA is considering lowering the National Ambient Air Quality Standards (NAAQS) to the 60 - 70ppb range, North Central Texas must explore every avenue to reduce harmful vehicle emissions. Argonne National Laboratories estimates every hour of idling creates 35 “ghost” miles on the vehicle’s engine.<sup>1</sup> These “ghost miles” not only contribute to the vehicle’s emissions, but also to the overall wear and tear of the vehicle. A Dallas Police Department idling study revealed 0.75 gallons of gasoline was consumed, per vehicle, for each hour of idling. The EPA’s Fuel Economy Guide states one gallon of gasoline burned equals 20 pounds of CO<sub>2</sub> emitted<sup>2</sup>. If the average daily idling time of police vehicles is 3.6 hours<sup>3</sup>, then each vehicle emits approximately 54 pounds of CO<sub>2</sub> emissions per day. This study also estimated 0.0658 pounds of NOx emissions, per vehicle, per gallon of gasoline burned are emitted. Again, using an average daily idling time of 3.6 hours, each vehicle produces approximately 0.1035 pounds of NOx emissions per day.

In order to comply with emergency vehicle operating procedures and reduce idling times, idle reduction technology systems have been developed that can be easily installed in emergency vehicles. When a patrol car arrives at the scene of a police incident, officers are required to leave the vehicle’s gasoline engine running in order to operate mission-critical electrical loads, such as the lights, radio, laptop and dashboard camera. Leaving the engine running wastes gasoline, pollutes the air, and wears down the engine. In order to address these idling issues, this proposal will require the installation of idle reduction technology that serve as an alternate power source and fit in the trunk or cargo area of patrol vehicles used by the Plano Police Department where it provides energy to power the vehicle's electrical load without the need to engage the engine. The Plano Police Department will commit to adopting and implementing an anti-idling policy for vehicles equipped with idle reduction systems installed, during routine traffic enforcement and traffic control support activities. This idle reduction technology allows the Plano Police Department to lessen the overall negative impacts on air quality while maintaining the ability to conduct daily enforcement activities. The installation and use of this idle

<sup>1</sup> <http://www.transportation.anl.gov/pdfs/TA/361.pdf>

<sup>2</sup> <http://www.fueleconomy.gov/feg/co2.shtml>

<sup>3</sup> 2.4 hours, Travis County + 4.8 hours, Dallas/2 =3.6 hours

reduction technology combined with anti-idling policy by the Plano Police Department will contribute to an effective clean air strategy.

The City of Plano is proposing to install 123 idle reduction units in Police Department vehicles. Based upon the estimates listed above, the anticipated reductions produced by this project are:

- A CO<sub>2</sub> reduction of around 6.75 tons per year, per vehicle or 837 tons per year for the fleet.
- A NO<sub>x</sub> emissions reduction of around 0.013 tons per year, per vehicle or 1.612 tons per year for the fleet.

In order to track the emissions benefits, the City of Plano will install 29 data collection units capable of tracking CO<sub>2</sub> and NO<sub>x</sub> emission reduction statistics, and the associated fuel and cost savings along with creating clear, concise reports and graphs outlining the savings. The City of Plano will include this information in their quarterly reports to TCEQ.

**Idle reduction programs are listed as part of the Weight of Evidence Section of the DFW SIP therefore Collin County will not claim any additional SIP credit for this project.**

**Authorized Signature:**

**Date:**