Alliance for Innovation Presentation 2014
Case Study Application

Case Study Title: North Texas Regional Emissions Enforcement Program

Case Study Category: Technology Advancements

Jurisdiction Name: North Central Texas Council of Governments (NCTCOG)

Jurisdiction Population: 6.5 Million

City/County Manager Name: Shannon Stevenson, Program Manager

Would you like the application to be considered for an Innovation Award? (eligible to Alliance member jurisdictions only): N/A

Would you like the application to be considered for our Rapid Fire Session? No

Project Leader (Primary Contact for case study notification)

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Synopsis

Overview: The Regional Emissions Enforcement Program (REEP) was developed by the North Central Texas Council of Governments (NCTCOG) to enhance the Texas Inspection and Maintenance (I/M) Program by targeting high-emitting vehicles to reduce emissions. This program was awarded an Environmental Protection Agency (EPA) Clean Air Excellence Award in 2010 and a Best of Texas Award in 2013 for being an innovative and collaborative effort among state and local agencies in Texas.

High-emitting vehicles are a significant contributor of nitrogen oxides (NO_X) emissions in the Dallas-Fort Worth (DFW) region, which has ten counties currently classified as nonattainment for the federal pollution standard for ground level ozone. In 2009, 3.7 million emissions inspections were conducted in the DFW region with a failure rate of 8 percent. Many of the vehicles failing the emissions test opted to display counterfeit inspection certificates instead of performing repairs, further adding to the air quality problem in the region. Before REEP, the only way law enforcement could crack down on this was to call the State, Monday through Friday, 8:00am – 5:00pm, to check the validity of an inspection certificate, which are displayed on the windshield in Texas.

After discovering this significant limitation put on law enforcement, NCTCOG began to work with the Texas Commission on Environmental Quality (TCEQ) to develop a database that could provide law enforcement 24/7 access to emissions records. The database, called the NCTCOG Emissions Database (NED), was developed in 2005 and is used not only to verify emissions certificates, but can also be used to determine which stations are conducting improper inspections and target covert enforcement activities around these locations.

Expanding upon this collaborative effort, NCTCOG has also worked with the Texas Attorney General's (AG) Office, the Texas Department of Public Safety (DPS), and various county Task Forces and Emissions Enforcement Programs to jointly investigate inspectors, inspection stations, and used car dealerships in the region suspected of fraudulent activity. From these efforts, a number of people have been charged with civil and criminal offenses related to illegal I/M activities.

Benefits: For every 10,000 high-emitting vehicles repaired or replaced, approximately 0.64 tons of NO_X is reduced per day. This is a significant savings seeing as the NO_X emissions budget for light-duty gasoline vehicles for the North Texas region is around 57 tons per day. In addition to the air quality benefits associated with getting high-emitting vehicles off the road, REEP has resulted in a secondary benefit of aiding in the identification of fraudulent and criminal activity related to the State's I/M Program such as: counterfeit inspection certificates and vehicle inspection reports; clean scanning (i.e. analyzer connected to passing vehicle to generate "passing" results for a failing vehicle); and On-Board Diagnostic II (OBD II) simulators used in place of an actual vehicle. During the past five years, the number of documented clean scans has been reduced by approximately 50% in most counties that have an active Emissions Enforcement Program. This translates into more vehicles being replaced or repaired to pass the State's emissions test, which in turn reduces air pollution.

Furthermore, citations for emissions related violations have increased considerably from very few being issued in 2005, when the program first began, to over 100,000 being issued by the end of 2012. Thousands of counterfeit certificates are estimated to be in circulation in North Texas and the State loses about $14 in revenue, and inspection stations lose about $25, for

every counterfeit certificate that is used; thus cracking down on fraudulent I/M activity also results in real savings to the State and to legit I/M inspection stations.

Cost: The REEP and NED were developed by NCTCOG using a $14,000 grant from EPA plus matching funds. NED is made available to all law enforcement officers in the State of Texas, at no charge, as is certified training, which is offered four times a year at NCTCOG offices and on an as-requested basis at other regional facilities. NCTCOG designed, developed, and continues to maintain NED as well as administer REEP at an approximate yearly cost of $200,000 for information technology (IT) and planner staff time plus training facility fees.

As a result of the successful pilot program funded by EPA in 2005, the State created a new revenue stream funded by a fee on every emissions test of 1996 and newer model year vehicles. This has been the primary source of funding for several years, however, due to state-wide funding cuts, this funding source has also taken a significant hit, with an 88 percent cut occurring in 2011. Currently, $625,000 per year is available state-wide for local air quality projects, with roughly $316,000 available for fiscal year 2013, to fund Task Forces and Emissions Enforcement Programs in North Texas. Yet, in spite of the cut, five task forces and emissions enforcement programs continue to be active in North Texas plus three others throughout the State. NCTCOG continues to advocate for the appropriation of additional funds to help these programs continue to be effective.

Conclusion: This Award winning program utilizes innovative technology in a four-pronged approach (on-road enforcement, covert operations, prosecution of offenders, and collaboration between agencies) to address high-emitting vehicles, which have a significant impact on ozone nonattainment in North Texas.