



North Central Texas Council Of Governments

TO: Control Strategy Catalog Development  
Project File

DATE: October 25, 2005

FROM: Chris Klaus  
Senior Program Manager



SUBJECT: Final On-Road Source Short List

The North Central Texas Council of Governments (NCTCOG), with assistance from ENVIRON International Corporation, and Earth Matters Inc. have completed a qualitative analysis of the on-road source emission reduction control strategies included in the Master List of potential measures. Due to the volume of on-road control measures, the qualitative ranking was performed in a similar, but simplified, manner as Task 2 under the September 13, 2005 Project Management Plan.

Onroad measures were first combined into more manageable programs by NCTCOG Transportation Department staff, which reduced the number of total measures from 628 to 97. Transportation Department staff took into consideration relative emission benefit and political support for strategies in defining the programs. Duplicative measures were also removed at this point. The resulting product was a Draft Short List presented at the Stakeholder Meetings on September 21 and 22, 2005.

Further evaluation of the Draft Short List by NCTCOG Transportation Department staff, ENVIRON International Corporation, Earth Matters Inc. refined the focus to a Final Short List of 57 strategies. Final Short List measures were selected taking into consideration the following:

- State Implementation Plan (SIP) creditability,
- Nitrogen oxide (NO<sub>x</sub>) control versus volatile organic compound (VOC) control,
- Emission benefit, implementation feasibility, cost-effectiveness and public acceptability,
- Availability of information to quantify the control measure,
- Comments received from local stakeholders, and
- Comments received from Texas Commission on Environmental Quality (TCEQ).

Final Short List strategies will undergo a more detailed quantitative analysis per Task 3 of the Project Management Plan. Quantification will be performed conjunctly by the NCTCOG Transportation Department, ENVIRON International Corporation, and Earth Matters Inc. prior to November 30, 2005.

CR:bw

Enclosure

## ON-ROAD SOURCE FINAL SHORT LIST

NCTCOG #	STRATEGY	DESCRIPTION
<b>Bicycle and Pedestrian</b>		
2, 3, 4, 8, 13, 31, 48, 47, 46, 44, 43, 42, 41, 40, 39	Construct Bicycle and Pedestrian Facilities Within the Current Street Right of Way	Sign bicycle routes on local street or low volume routes that reach destinations. Add bike lanes or wide outside lanes to collectors and arterials. Fund the construction of sidewalks and bicycle facilities in the right of way with all new or reconstructed roadways. Construct sidewalks, crosswalks, medians, pedestrian signals, street furniture, and other pedestrian connections.
7, 16	Construct Bicycle and Pedestrian Facilities on Separate Right of Way	Construct priority segments of the regional Veloweb. Provide morning and evening lighting along off-street bicycle and pedestrian routes.
23, 24, 25, 26, 27, 32, 33, 34, 35	Construct End-of-Trip Bicycle and Pedestrian Facilities	Permit bicycles on all transit vehicles. Expand bicycle parking at transit. Create a new ordinance, to be endorsed by the Regional Transportation Council and adopted by local governments that all employment centers with greater than 100 employees shall provide facilities for bicyclists and pedestrians to secure their bicycle, clothes and other items, shower and change for work, and do basic repairs on a bicycle. Create a new ordinance, to be endorsed by the Regional Transportation Council and adopted by local governments that all property owners must provide bicycle parking equal to 2% of available automobile parking.
1, 18, 19, 20, 21, 22	Educate or encourage frequent, safe bicycling and/or walking	Provide coupons for free bicycle repairs. Develop local action groups to promote bicycling and walking. Develop and provide free bicycle route maps. Require local bicycle coordinators at all transportation providers and at all local governments. Increase media promotion of bicycling and bicycle safety.
<b>Clean Vehicle Programs</b>		
53, 187	Financial Incentives for Clean Vehicles	Provide a financial incentive program for the purchase of vehicles meeting higher standards for fuel economy or emission scores. Incentives could be used towards the purchase of or conversion to an alternative fuel vehicle, hybrids, retrofits, repowers, and other aftermarket technologies approved by NCTCOG. Incentives could also be used towards the purchase of new model year or engine standards that meet particular emission criteria. Incentives could be available for public entities and include rebates and other grant assistance. Incentives towards clean vehicle purchases, like sales tax reduction and property tax reduction, could be used for private entities.
54, 55, 59, 66, 70, 71, 73, 75, 78, 589	Clean Fleet Vehicle Procurement Policy/Clean Fleet Program	Create a fleet program that addresses the clean vehicle acquisitions, operations, maintenance, and verification of public and private fleets. Furthermore, the program will promote the use of heavy-duty and light-duty alternative fuel, hybrid, and clean diesel vehicles and technologies. This program would also incorporate public recognition of fleets participating in the clean fleet program.
<b>Freeway Incident/Roadway Construction Management</b>		
84, 88, 89, 94	Intelligent Transportation System Technology [Also see Notification Using Dynamic Message Signs below]	This would include more accurate information from permanent and mobile electronic message locations. Greater attention will be placed on providing information on alternative transportation routes. Greater communication between the planners impacting freeway operations with actual freeway operators, will lead to less disruption by integrating greater surveillance and control.

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NCTCOG #	STRATEGY	DESCRIPTION
92	Location of Enforcement Protocols	Continue the education that all insurance data information exchange should take place off of the freeway system and on to the frontage roads. Encourage police officers to conduct their citation activities also on the frontage roads. This will improve air quality operations, enhance the safety of the public and the police officers, and increase the reliability of the transportation system.
90, 93, 95, 97, 98, 99, 101	Mobility Assistance Operations/Freeway Operations	Increase the mobility assistance network both in hours of operation and miles of roadway. Allocate more intensive service hours during the ozone season. In addition, this would include greater enforcement and removal of parked vehicles on the freeway shoulder lanes, greater use of shoulders and frontage roads to circumvent accidents, and continued education of the "Steer It/Clear It" program. Tow trucks will be located at critical locations to more quickly remove disabled vehicles, especially during the ozone season. Ordinances with local governments will be established to minimize the delay in dispatching tow truck services. TxDOT will pursue the use of glare screens to reduce rubber necking delays on the transportation system.
100, 103, 300, 302, 310	Aggressive Driving and Speed Enforcement	Increase police enforcement of speeding and aggressive driving leading to lower direct emissions from reduced vehicle speed and lower indirect emissions from increased roadway reliability due to fewer accidents. This will lead to more environmentally friendly driving. Fewer accidents will increase roadway reliability.
102	Reduced Occurrence of Incidents	Enhance a freeway bottleneck program, which eliminates sharp/dangerous locations areas with poor sight distance and areas with inadequate or no longer appropriate roadway design.
<b>Intelligent Transportation Systems (ITS)</b>		
205	Notification At High Activity Centers	Advance real time traffic information at kiosks, truck centers, rental car agencies, and other high activity areas, which could benefit from real time information to the traveling public.
211	Notification At Train Stations	Advance real time display of train arrivals at rail stations.
201	Notification By Radio	Advance use of radio communication to avoid congestion.
203	Notification Using Cell Phones	Advance cell phone text messaging capabilities by providing information to assist users of the public transportation system and the freeway/toll road system. In addition, advance the use of telephone
209, 210	Notification Using Dynamic Message Signs	Advance use of dynamic message signs for freeway traffic control. This includes the use of message signs for the control of truck movements. Particular attention will be placed at freeway locations that exhibit high truck incident frequency. Increase the effectiveness of electronic message signs by adding travel times anticipated on different routes.
202, 206, 207, 212	Notification Using the Internet	Advance use of Internet homepages to relay traffic conditions. This will require increased system surveillance and greater use of speed sensor technology integrated in real time to the traveling public. This will also include other roadway conditions impacting the transportation system.

## ON-ROAD SOURCE FINAL SHORT LIST

NCTCOG #	STRATEGY	DESCRIPTION
133, 134, 139, 141, 144, 145	Truck Roadway Infrastructure	Fund improvements to ITS technology to allow for real time speed and travel time data to be reported on all controlled access freeways and select major arterials in the region frequented by freight trucks. Provide dedicated lanes and access/egress points for freight truck traffic. Identify locations on the freeway system where speed and acceleration differentials indicate an air quality benefit from truck lane restrictions could be achieved.
309	Work-zone Enforcement and Safety	Enhance visibility of work-zone speed limits when workers are present and posted speed limits when workers are not present. Addition of flashing speed limit sign will increase visibility and notify drivers that workers are present for worker safety.
<b>Freeway System Infrastructure</b>		
<b>Fuel Evaporative Emissions</b>		
<b>Fuel Standards</b>		
118	Lower Reid Vapor Pressure	Texas currently has a maximum RVP of 7.8. This strategy would investigate the benefits of lowering the maximum RVP in Texas. Maximum RVP is controlled because of the increased VOC emissions that result from gasoline with higher RVP levels. The nationwide range for RVP for reformulated gasoline certified under the simple model is 6.6 - 9.0 psi. The nationwide range for RVP for reformulated gasoline certified under the complex model is 6.4 - 10.0 psi.
<b>Funding</b>		
<b>General Public Education and Outreach</b>		
<b>Goods Movement</b>		
<b>High-Emitting Vehicle Detection and Programs</b>		
173, 179, 182, 619	AirCheck Texas Repair and Replacement Assistance Program	Offer financial assistance to low-income vehicle owners whose vehicles fail the emissions inspection test. The program is designed to help vehicle owners comply with vehicle emissions standards to reduce ozone-forming pollutants created by on-road motor vehicles. The program targets the highest polluting vehicles and provides an incentive for citizens to contribute to the regional air quality solution. Qualified participants may receive a voucher worth up to \$600 for emissions repairs, or \$1,000 towards the cost of a replacement vehicle that meets emissions standards if they retire their old vehicle.

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NCTCOG #	STRATEGY	DESCRIPTION
172, 173, 179, 183, 185, 186, 190, 191, 192, 620	Enhanced AirCheck Texas Repair and Replacement Assistance Program	Administer an enhanced emissions repair and replacement assistance program to individuals not eligible for assistance under the existing AirCheck Texas Repair and Replacement Assistance Program guidelines. Local agencies would administer a program targeting high emitting vehicles by partnering with aftermarket manufacturers, retail and wholesale parts suppliers, Recognized Emission Repair Facilities, replacement facilities, auto manufacturers and dealerships, and other interested parties. The program will assist vehicle owners with emission repairs by offering coupons, rebates, various incentives, and possibly assistance with diagnostic and repair expenses. The program will also provide vehicle owners the ability to retire and replace their high emitting vehicles through partnerships established with auto manufacturers and area dealerships and also work to provide assistance to nonprofit organizations. The program would enable local agencies the ability to optimize aftermarket partnerships by concentrating on individual segments of the emissions repair and replacement markets.
<b>High-Occupancy Vehicle (HOV)/Managed Lanes</b>		
150, 151, 152, 153, 161, 162	Higher Vehicle Occupancies	Higher occupancies can be encouraged through incentives such as free or reduced tolls for HOVs on managed facilities and express type travel on restricted lanes for HOV/transit use only, or increasing vehicle occupancy requirements.
<b>Ozone Action Day/Ozone Season</b>		
<b>Parking Management</b>		
223, 224, 225, 233, 234, 263, 264, 268, 269	Parking Supply Strategies	Require a shared parking plan and agreements for all developments, including unrelated developments on adjacent parcels. Require developers adjacent to rail to include with their site plan a pedestrian access to transit plan and a shared parking plan. Reduce minimum parking requirements for developments with a pedestrian access to transit plan and a shared parking plan. Establish maximum parking limits for all land uses. Require an ITS parking space identifier system for all major parking areas.
227, 228, 229, 230, 231, 232, 241, 242, 249, 250, 253	Parking Demand Strategies	Provide preferential or reduced cost parking to preferred drivers throughout transit, public and private parking lots. Provide remote parking with shuttle services. Price parking based on vehicle type, occupancy, and/or arrival time. Require toll tag parking fee collection at all stop and pay to park lots to reduce vehicle idling.
<b>Pricing Measures</b>		
275, 281, 287, 290, 294	Measures to Discourage Travel	Reduce vehicle trips by discouraging travel through strategies such as congestion pricing at major activity centers, local or regional fuel taxes, cold start taxes or a vehicle tax for two or more vehicles per household.

## ON-ROAD SOURCE FINAL SHORT LIST

NCTCOG #	STRATEGY	DESCRIPTION
273, 274, 278, 280, 283, 284, 286, 288, 289, 291, 298	Measures to Incentivize Reduced Trips	Reduce vehicle trips through pricing incentives such as accelerated depreciation allowances for employer-provided vanpool or bicycle facilities, state and local exemptions for provision of vanpool and transit benefits, no tolls for buses and vanpools, discounted registration for lower-than-standard annual vehicle miles traveled, exemption of rideshare vehicles from "common carrier" tax status, Pay-As-You-Drive Automobile Insurance, and other tax incentive and subsidy programs for insurance coverage and liability responsibility.
295, 296, 297, 299	Measures to Discourage Peak Period Trips	Shift trips out of peak period through discouragement using strategies such as increasing tolls during peak traffic periods, charging peak period tolls to enter designated congested areas, increasing tolls during daytime traffic periods and levying higher rates during daytime hours for a vehicle miles traveled charge.
272, 276, 279, 285, 292, 293	Encourage Greater Fuel Efficiency	Encourage greater fuel efficiency or switching to lower-emission fuels by strategies to encourage ownership of multiple vehicles (use most effect vehicle that serves a purpose), progressive registration fees by vehicle emission standards (age), tax credits for alternative fuel use, exclusion of sales tax on hybrid and other clean vehicle purchases, tax increase for cars and mobile equipment below a certain EPA standard, greater charge for higher emission fuels.
TCEQ	Miles-Per-Gallon Surcharge	One-time fee on new vehicles based on fuel efficiency of vehicle - ranges from \$0 to several hundred - encourages smaller, fuel-efficient vehicles. Would encourage vehicle purchasers to consider the fuel economy of the vehicle at the time of purchase and may encourage the purchase of more fuel-efficient vehicles. Need data on how many very fuel efficient vehicles would replace "average" vehicles. Very hard to quantify and convert to NOX/VOC benefits.
<b>Speed</b>		
TCEQ	Speed Reduction (70 to 65 mph)	Trucks can improve fuel economy by reducing highway driving speeds. Truck fuel economy drops significantly as speed rises above 55 mph. Higher speeds can also lead to higher engine maintenance costs. From EPA's "Industry Options for Improving Ground Freight Fuel Efficiency," Draft Report for Review Dec. 14, 2001. Both DFW and HGB onroad inventories already assume posted speed limits of 65 mph, so no net benefit can be claimed.
TCEQ	Speed Reduction (65 to 60 mph)	Trucks can improve fuel economy by reducing highway driving speeds. Truck fuel economy drops significantly as speed rises above 55 mph. Higher speeds can also lead to higher engine maintenance costs. From EPA's "Industry Options for Improving Ground Freight Fuel Efficiency," Draft Report for Review Dec. 14, 2001
<b>Sustainable and Transit-Oriented Development</b>		
	Tax and Financial Strategies (Continued)	Provide free or discounted transit passes to residents and employees who live or work along the rail system and meet income requirements. Withhold federal funds for transit facilities from projects that fail to meet sustainable development land use criteria.

## ON-ROAD SOURCE FINAL SHORT LIST

NCTCOG #	STRATEGY	DESCRIPTION
<b>Traffic Flow Improvements</b>		
331, 332, 334, 335, 339, 342, 343, 344, 345	Freeway and Arterial Improvements	This includes major widening projects for highly-congested roadways, as well as lower-cost measures to reduce specific bottleneck problems. Strategies include re-design of driveways (spacing and entrances), use of one-way streets, use of reversible traffic lanes, construct of shoulders, and development of off-street loading areas for commercial vehicles.
328, 337, 338, 341	Intersection Modifications	This group of strategies includes case-specific changes to intersection geometries that are designed to improve overall efficiencies in traffic movements. In some situations this will include turning movement restrictions, while in other situations this will include installation of new turn and/or through lanes.
329, 330, 333, 346, 347, 348, 349, 353, 354	Traffic Control	Real-time traffic flow management solutions include ramp metering and other controls to encourage better utilization of available road capacity. Special strategies include selective ramp closures to discourage short-distance use of freeways, regional route marking systems to encourage underutilized capacity, auto-free zones, and removal of traffic signals that may no longer be warranted.
350, 351, 352, 355, 356, 359, 360	Traffic Signal Improvements	Update traffic signal equipment, vehicle detectors, and software to be more responsive to changing conditions. Re-time groups of traffic signals so they not only promote traffic progression and mobility, but maximize total emissions savings. This includes new signal phasing and offset plans by time-of-day, as well as new computer-controlled, volume-actuated plans. Bus traffic signal pre-emption/priority strategies designed to improve bus operating speeds should be developed so that the negative impacts on overall traffic flow can be minimized.
<b>Traffic Management</b>		
366	Drive-Thru Service Restrictions	Prohibit drive thru service during ozone season. This applies to, at minimum, fast food restaurants, banks, pharmacies, and dry cleaners.
<b>Transit</b>		
405, 426, 373, 374, 375, 377, 381, 382, 384, 386, 407, 428, 390, 431, 427, 429, 387	Transit	Transit provides an efficient, reliable, cleaner means of travel than Single Occupant Vehicle (SOV) travel. Strategies, which encourage travelers to use transit or HOV rather than SOV, provide Air Quality Benefits. Strategies, which make driving less attractive, more costly, will draw drivers to transit or HOV will also provide Air Quality Benefits. Strategies such as making transit more convenient and reliable such as additional light rail and commuter rail lines, exclusive bus lanes, easily understood fare structures and transfers, and subsidized transit service. In addition, strategies to improve transit amenities such as business class service, more comfortable and attractive bus and rail stops, increased security can be used to make travel more pleasant and convenient. Strategies to make automobile travel less attractive will also be beneficial to transit such as increased parking cost, higher fuel cost, higher vehicle registration fees, and more toll roads.

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NCTCOG #	STRATEGY	DESCRIPTION
TCEQ	Fare-Free Transit, System Wide on Ozone Action Days.	Would require sponsorship and /or commitment of significant public funds. This policy should by itself generate long-term increases in ridership. To be effective, this would require expanded transit fleet and possibly support facilities. Funds could come from peak-hour commuter parking space tax. Potential TCM - applicable to non-attainment and near non-attainment areas.
TCEQ	Transit Off-Peak Pass	Provide an off-peak unlimited-ride pass. This practice would encourage use of transit for midday, evening, and weekend trips by those who do not commute by transit. Incremental cost to provide service would be negligible due to unused midday transit capacity. May encourage reduction in peak load. Potential TCM - applicable to non-attainment areas. 0.1% to 1% reduction in VMT.
<b>Travel Demand Management - Business Operations</b>		
<b>Travel Demand Management - Employer Trip Reduction</b>		
462, 471, 480, 483, 485, 489, 492	Incentives for Employer Amenities	Initiate an employer tax credit or deduction for businesses that offer in-building cafeterias, gym facilities, on-site convenience stores, purchase vans for vanpools, free or subsidized transit (bus, rail, party bus), and offer remote or satellite offices close to residential areas.
463, 464, 465, 468, 470, 472, 476, 481, 482, 484, 493	Incentives for Employer Business Efforts	Implement a program that rewards business efforts that encourage an increase in teleconference meetings, offer discounted or free lunches on ozone action days, mandate or encourage vanpooling and carpooling, offer financial incentives to its employees for not driving, provide food vendors at remote worksite locations, provide business-based concierge services, provide personalized travel planning, and allow the use of employer's fleet during business hours. Also offer rewards to businesses that offer mandatory or voluntary flextime programs (daily start and end time), staggered workdays, staggered lunch schedules and midday flexibility for trip chaining.
475, 486, 487, 488, 490	Telecommuting	Increase the incentives for Best Workplaces for Commutes Designation that offer telecommuting incentives or mandates, full-time telecommuting with full tele/video conferencing and electronic support, provide home computers and work stations for employees that participate in telecommuting and determine current and future availability of dsl/cable for residential use.
460, 461, 469, 473	Ride Sharing	Advocate positive reinforcement for alternative travel to include subscription buses or buspooling, internet ride matching services, and the requirement of some employer subsidy for employees parking and transit.
<b>Travel Demand Management - Regional Applications</b>		
496, 497, 499, 501, 503, 504, 508	Incentive Programs	Implement regional vanpool programs and rideshare matching, transit marketing and information programs. Also implement shared ride taxis, shared hybrid vehicles, and car sharing (Flexcar) programs. Establish a rewards system for reducing total vehicle miles traveled in a city of region and an ozone season transit incentive program.
500, 505, 506, 507	Community Outreach	Encourage pooled ownership of single occupant vehicles for local midday travel. Develop informational materials that incorporate employee surveys, subject advocacy and education.

## ON-ROAD SOURCE FINAL SHORT LIST

NCTCOG #	STRATEGY	DESCRIPTION
<b>Travel Demand Management - Schools and Colleges</b>		
516	Ride Sharing (Schools & Colleges)	Encourage schools and universities to offer intramural and after school van service or pooling.
<b>Travel Demand Management - Special Events</b>		
<b>Vehicle Emissions Standards</b>		
551, 552, 553, 556, 555	California Low Emitting Vehicle (LEV) II Standards	Adoption of California's Low Emitting Vehicle (LEV) II standards would have slightly more NOx benefit relative to the Federal Tier 2 standards with or without the zero emission vehicle (ZEV) component. VOC, PM, and GHG will also be dramatically reduced with LEV II over Tier 2 standard. Overall, passenger vehicle emissions reduction benefits will continue to increase over time with implementation of LEV II over Tier 2 standards. Adopting LEV II would also help to encourage EPA to further tighten emission standards on all new passenger and light-duty commercial vehicles and would aid in requiring the purchase of ultra LEV (ULEV) by mandated fleets within the state. Also, adopting California's Heavy-Duty Diesel Vehicle Standards would further reduce emissions from vehicles within the region.
TCEQ	CARB Zero Emission Vehicle (ZEV) Standards	Require a percentage of vehicles sold in Texas to be zero emission (or partially zero emissions, or PZEVs, such as hybrid electric vehicles). The aim of this program is to encourage auto manufacturers to develop clean vehicle technologies and make these available to the consumer. The manufacturer would have the option of electing a new alternative ZEV compliance path, under which the manufacturer would meet part of its ZEV requirement by producing its sales-weighted market share of approximately 250 fuel cell ZEVs by the 2008 model year. <a href="http://www.arb.ca.gov/msprog/zevprog/factsheets/2003zevchanges.pdf">http://www.arb.ca.gov/msprog/zevprog/factsheets/2003zevchanges.pdf</a>
TCEQ	CARB 2007 On-Highway Diesel Engine Standards	Adopt by reference California's 2007 standards for on-highway heavy-duty diesel engines. These standards are identical to national standards of 0.2 g/bhp-hr NOx and 0.01 g/bhp-hr PM. CARB standards go beyond EPA's by including buses. Will wait until 2009 inventory is received to finalize.
<b>Vehicle Engine Modifications</b>		
<b>Vehicle Idling</b>		
583, 584, 586	Idle Reduction Infrastructure	Implement idle reduction electrification projects at public parking facilities such as truck stops and rest stops to help heavy-duty vehicles reduce idling. Implement idle reduction electrification projects at private facilities, such as goods movement terminals, airports, hospitals and ambulance stations.
<b>Vehicle Inspection and Maintenance (I/M)</b>		
589, 591, 605, 607, 608, 613	Policy	Enforcement of partially implemented strategies such as license plate renewal tied to current emissions inspection, bar codes on inspection stickers, test on resale, I/M certification to operate in non-attainment counties needs improvement. Local rules should be adopted to inspect highly traveled vehicles (such as taxi cab fleets) more than once per year if operated in a non-attainment area. Military ground equipment inspections should be considered, also.

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NCTCOG #	STRATEGY	DESCRIPTION
593, 594, 595, 601, 609, 610	Expanded I/M	The current I/M program should expand to include all OBD II vehicles, regardless of weight class and possible tighten the standards on existing vehicles being tested. The I/M program should also expand to include all 2-24 year old diesel vehicles including light-duty and heavy-duty diesel vehicles. Safety, opacity testing, and OBD testing should be conducted on all 1997 and newer vehicles, with all older vehicles being subject to safety and opacity testing. The I/M program should also consider testing of out of region vehicles for compliance.
587, 590	Statewide Emissions Testing	Statewide emissions testing and a border crossing inspection program should be established.
TCEQ	I/M Waivers	Repeal or limit the waivers allowed under current I/M program Sec. 114.50 - 114.53. The Existing Waivers: "Program requirements are waived if, The registered owner of the vehicle cannot afford to comply with the program, based on reasonable income standards. A vehicle cannot be brought into compliance with emissions standards by performing repairs. A vehicle on which at least \$100 has been spent, has been driven fewer than 5000 miles since the last safety inspection and will be driven less than 5000 miles before the next safety inspection; or if parts are not readily available for a vehicle." Will model effect of 0% waivers when 2009 inventory received from NCTCOG.
TCEQ	I/M Pre-1975 Vehicle Exemption	Replace Rolling 24-year Exemption with Exemption of pre-1975 Vehicles. In Texas, the rolling exemption is 24 years. Changing this exemption to a set pre model year like 1975 will help with keeping the gross emitters off the street. However, vehicles registered, as antique will be excluded from this requirement.

**Vehicle Operations Management**