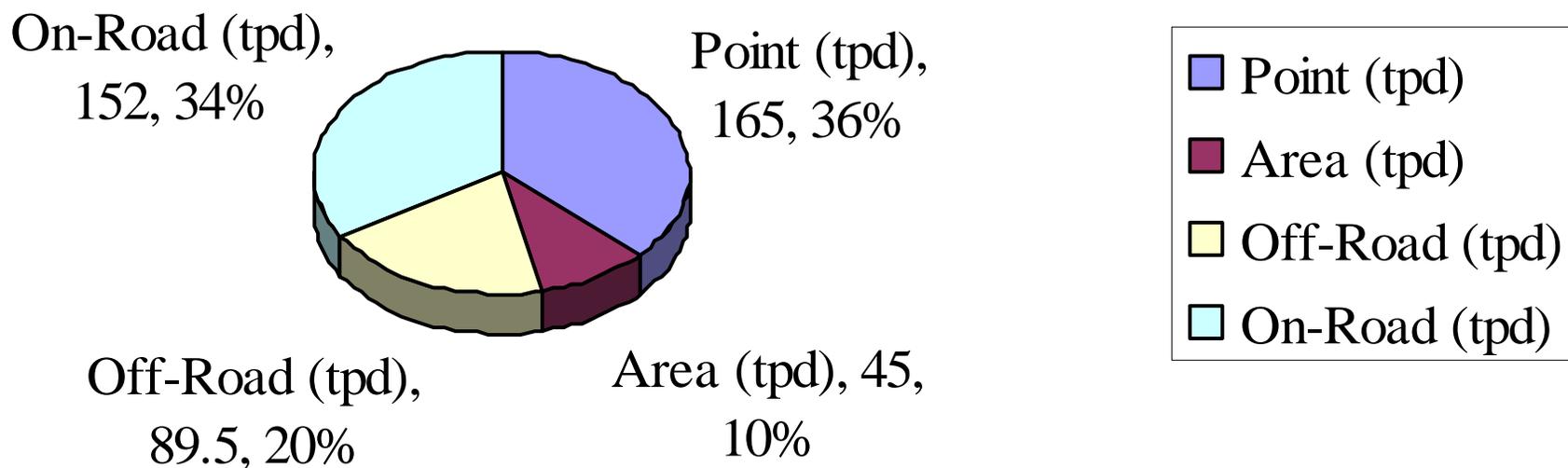


# Update on the Status of Mobile Source Control Strategies

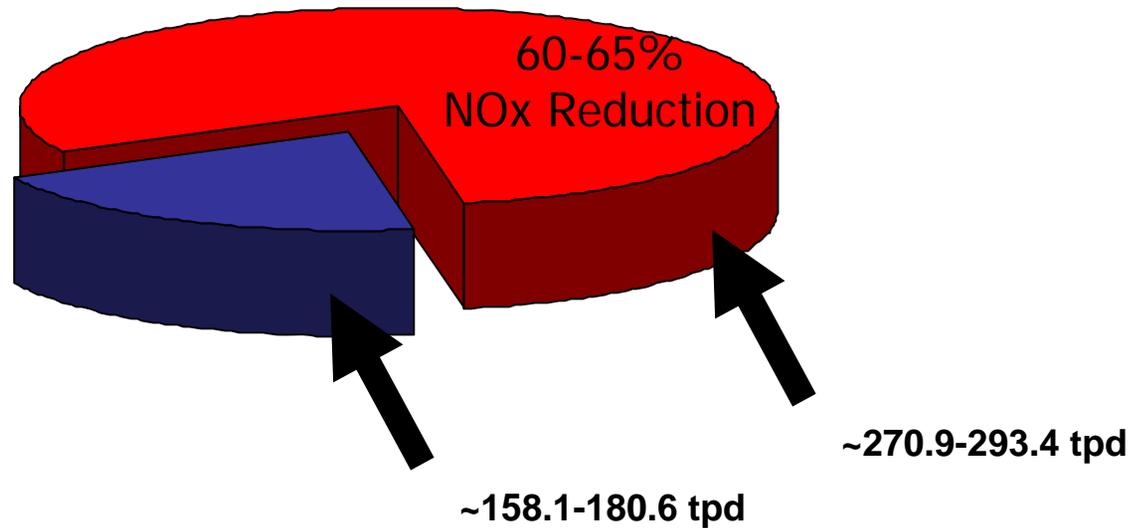
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Graciela Lubertino, PhD

## 2009 NO<sub>x</sub> Emission Inventories (Total= 451.5 tpd)

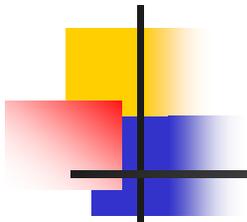


# HGB NOx Reductions Needed by 2009

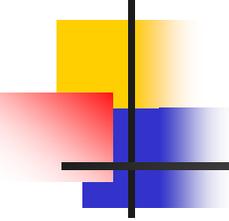


Number	Strategy	Added Description	NOx Low (tpd)	NOx High (tpd)
54, 59, 73, 74, 79	Public and private sector clean fuel fleets (Clean Cities/Clean Vehicles)	This measure is the currently operating H-GAC Clean Cities/Clean Vehicles Program, which funds repower, retrofits, and clean technologies for heavy-duty vehicles. This could include hybrid-electric transit buses, other electric buses, fuel cell school buses, propane school buses, and other low emitting heavy-duty vehicles.	0	9
115	Cleaner diesel fuel	Increase of additional cetane additives or ultra reformulated diesel fuels for emission reductions beyond TxLED.	0.1	10
291	taxes	Charge a tax for VMT per year.	5.2	5.2
277, 278	Pay-As-You-Drive Insurance (per-mile)	Insurance prices vary by the driving amount. This provides a financial incentive to reduce driving.	4.4	4.4
144	Divert trucks from nonattainment areas	Encourage through-traffic trucks to travel around rather than through nonattainment areas.	0.6	4
300, 304, 312	Lower heavy-duty vehicle speeds and/or increase enforcement of current speed limits.	Lower speed limits for heavy-duty vehicles and/or add enforcement. This measure may be implemented for safety reasons or to reduce incident-related congestion.	1.7	3.9
551	California LEV	Adopt the California Low Emitting Vehicle Program in Texas.	0.1	2.4
459	Compressed work week	To reduce commuting vehicle miles traveled.	2.3	2.3
578	Reduced idling of heavy-duty vehicles.	Discourage idling of all types of heavy-duty vehicles.	1.1	2.2
271, 287	Local or regional fuel taxes.	Increased fuel tax within the nonattainment area.	1.5	1.5
487	Telecommuting incentives	Enhance the current Commute Solution telework program.	1.5	1.5
553	Adopt California standards for public and private fleets.	comply with California rules, including transit buses, refuse collection vehicles, fuel delivery trucks, and other heavy-duty vehicles.	0	1.5
601, 604	Expand inspection and maintenance programs.	Expand inspection and maintenance (I/M) program to Chambers, Liberty, and Waller counties where I/M is not currently implemented.	0.81	0.81
462, 463, 496	Expanded vanpooling	Encourage an expansion of the current vanpool assistance programs.	0	0.2
499, 500, 501	Shared vehicles	Shared vehicles among a group of owners	0.53	0.53

172, 282	Scrappage/buy-back plan	Expanding the Low Income Repair Assistance Program (LIRAP). Heavy-duty vehicle scrappage addressed under Measure 54.	0	0.4
51	Clean Freight (EPA Smartway Program)	program for improving energy and emission performance of freight movement.	0.4	0.4
461, 503, 504	Internet ridematching services, incentives, rewards for ridesharing	Real-time ridematching offered via a website, by an employer, or by a third party (sponsored by city or transportation authority). NuRide has been running just such a pilot program with H-GAC.	0.27	0.27
376, 403, 407, 484	Personalized rapid transit, subscription bus service, internet capable transit, personalized transit planning	Targeted transit services to appeal to potential users who need convenience-based incentives to use transit. TREK and other Transportation Management Organizations could assist in providing internet and personalized planning to provide better connections between Metro and vanpools, subscription buses, etc.	0.21	0.21
155, 157, 159, 161	Encourage higher vehicle occupancy	Additions to Commute Solutions existing programs to increase occupancy to three or more per vehicle to HOV and transit stations.	0.14	0.14
70, 71, 72, 75, 79	Ultralow or Zero Emitting Vehicles	Introduction of a program to increase the use of zero or low emitting light-duty vehicles. Primarily a measure for ultraclean light-duty vehicles in individual or private, commercial, or public fleets including taxi cabs and shuttle vehicles.	0.13	0.13
227, 228, 229, 241, 261	Preferential parking for High Occupancy Vehicle (HOV) users and other ride sharers	Extend free spaces, reserved spaces, commuter parking pricing, create retail parking spaces for HOVs. This program could also be extended to include hybrid/alternative fuel or other very low emitting vehicles.	0.11	0.11
371	Reduce transit fares	Increased transit ridership program	0.08	0.08
248, 249, 470	Eliminate employee parking subsidies. Include employee parking cash-out programs, subsidies for not driving to work	Employer pays a monthly stipend to employees who do not drive; employees who drive receive no corresponding benefit.	0.04	0.04
17	Increased bicycle and pedestrian travel	A specified percentage of employees can request facilities as a group and pledge to commute by bicycle.	0	0
99, 100, 101	Area-wide "Steer It/Clear It" program, augment quick removal of disabled	Program for immediate removal of disabled vehicles from the roadway in event of a stall or non-serious accident. Operation of	0	0
275	Congestion pricing for major activity centers	Charge vehicles to enter high-activity centers (retail/business districts, etc.) in cities, with higher prices charged during high-traffic hours.	0	0
295	Increase tolls during peak traffic periods	Increased pricing during peak periods on toll roads.	0	0



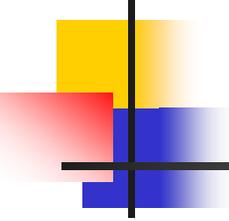
342, 350, 351, 352, 354, 355, 360	Traffic signalization improvements, intersection improvements, Reversible traffic lanes	This measure would be implemented to reduce congestion and inefficient travel.	0	0
424	Unlimited-ride daily pass	Provide an off-peak unlimited-ride daily public transportation pass.	0	0
426, 441	Universal card	Introduce combined payment systems for TREK and Metro transit services	0	0
453	Reduced peak period travel	Staggered work hour programs for area employers.	0	0
471, 470, 249	Employer tax credit or deduction	Institute a tax credit or deduction for employees that regularly use a non-single occupancy vehicle mode for commuting and/or for employers, based on number of employees that commute using non- SOV.	0	0
<b>TOTAL</b>			<b>21.22</b>	<b>51.22</b>



# Additional Comments for on-road

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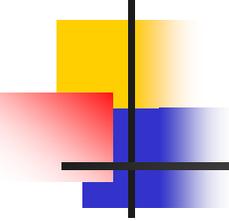
- Mandated fleet turn over standards should be implemented
- Enforce diesel engine re-flashing
- More efficient access to HOV lanes
- Maximize transition to cleaner vehicles like hybrids.



# Comments for non-road

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- The emission inventories should reflect the fleet turn over for rail, aviation and marine equipment.
- Reimplementation of low sulfur requirement for diesel non-road equipment
- The state must adopt a cleaner fleet standard beyond federal standards for non-road publicly own fleets.
- Additional regulations for diesel generators.
- Catalytic converters for leaf blowers and lawn mowers



# Total NOx emission reductions

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- On-Road:

Low side: 8% 12.13Tpd

High side: 26% 40.3Tpd

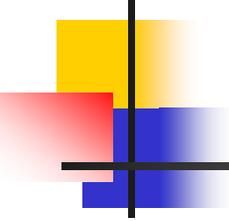
Required: 65% 99Tpd

- Non-Road:

Low side: 6.7% 6.03Tpd

High side: 67% 60.31Tpd

Required: 65% 58Tpd



# TPC Legislation Recommendation

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- At the April meeting, TPC recommended the full appropriation of funds for TERP and LIRAP.