Dallas-Fort Worth (DFW) 1997 Eight-Hour Ozone Nonattainment Area Mobile Source Control Strategy Planning Draft Initial Concept List

The following is a draft list of initial control strategy concepts for the DFW 1997 eight-hour ozone attainment demonstration. These concepts are only presented for further consideration as potential control strategies to help the DFW area attain the 1997 eight-hour ozone National Ambient Air Quality Standard. Further research and evaluation of the concepts is necessary to determine the ozone reduction benefit as well as technical and economic feasibility. Concepts are not listed in any particular order of priority, effectiveness, or feasibility.

Concept Description	Pollutant
Ban Segways from use on sidewalks and hike/bike trails	NO _X and VOC
Safer bike routes with better signs marking lanes and routes	NO _X and VOC
Include bicycle lanes on state/federal funded thoroughfare projects	NO _X and VOC
Bicycle route signalization	NO _X and VOC
Bicycle lanes on every arterial/frontage road	NO _X and VOC
Bicycle lane/path repaving	NO _X and VOC
Bicycle route lighting	NO _X and VOC
Increased bicycle/pedestrian outreach to immigrant communities	NO _X and VOC
Media coverage/promotion of bicycle facilities	NO _X and VOC
Bicycle education	NO _X and VOC
Region-wide mandatory bicycle racks at work sites	NO _X and VOC
Address security concerns of pedestrians/cyclists	NO _X and VOC
Showers and clothing lockers	NO _X and VOC
Bicycle lockers, racks, and other storage facilities	NO _X and VOC
Biking/hiking patrols to ensure safety	NO _X and VOC
Integration of bicycle/pedestrian facilities with transit	NO _X and VOC
Permit bicycles on rail transit	NO _X and VOC
Bicycle racks on buses	NO _X and VOC
Street level shops	NO _X and VOC
Give bicyclists/pedestrians the right-of-way	NO _X and VOC
Cyclist/pedestrian sidewalk furniture	NO _X and VOC
Sidewalks and walkways	NO _X and VOC
Crosswalks	NO _X and VOC
Additional pedestrian access and circulation	NO _X and VOC
Pedestrian signals	NO _X and VOC
Connected street system and pedestrian pass-throughs	NO _X and VOC
Pedestrian design improvements	NO _X and VOC
Mid-block pedestrian connections	NO _X and VOC
Wide, unobstructed sidewalks on both sides of all arterials, major roads, and other streets	NO _X and VOC

Concept Description	Pollutant
Fuel cell school buses	NO_X
Airports use Ultra Low Emitting Vehicle (ULEV) or electric vehicles instead of diesel for ground transportation	NO _X and VOC
Propane school buses	NO_X
Use solar cells to run air conditioning and other electrical equipment on Metro buses	NO_X
Locate hazardous freeway areas for possible improvements, sharp turns, clover leafs, etc	NO _X and VOC
Limit road and highway improvements to those benefiting transit and high occupancy vehicle lanes	NO _X and VOC
Shift highway funds to transit	NO _X and VOC
No new peripheral highways or loops	NO _X and VOC
California diesel fuel	NO_X
Reformulated fuels for off-road vehicles	NO- _X
Celebrity volunteers for ozone alert announcements	NO _X and VOC
Air quality public outreach	NO _x and VOC
Designated truck routes	NO _X and VOC
Dedicate truck lanes	NO _X and VOC
Require accelerated turnover of short-haul trucks to comply with new standards	NO_X
Ban the use of High Occupancy Vehicle (HOV) lanes by trucks	NO _x and VOC
More aggressive HOV enforcement	NO _X and VOC
HOV service on all freeways with increased access	NO _X and VOC
Focus on finding extreme high emitters with emphasis on finding and replacing, not penalizing	NO _X and VOC
Roadside pullovers	NO1VOC
Portable inspection/maintenance measures	NO_X and VOC
High-emitting vehicle repair assistance	NO _x and VOC
Accelerated vehicle retirement program	NO _x and VOC
Dedicated funding for accelerated turnover of school buses to comply with new standards	NO_X
Buy vehicles older than model year 1975 to retire from use	NO _X and VOC
Expanded repair and replacement assistance program	NO _X and VOC
New vehicle discounts for old vehicle trade-ins	NO _X and VOC
Transit passes/credit in exchange for old vehicle scrappage	NO _X and VOC
Ban sale of high-emitting vehicles	NO _x and VOC
Deny registration to vehicles with repeated emission failures	NO _X and VOC
Increase parking at transit centers or stops	NO _x and VOC

Concept Description	Pollutant
Provide parking at all major transit stations	NO _X and VOC
Cheaper gasoline prices during evening hours	VOC
Discourage people to have multiple cars	NO _X and VOC
State and local exemptions for pooling/transit subsidies	NO _X and VOC
No tolls for buses and vanpools	NO _X and VOC
Manage location of new growth to limit additional sprawl	NO _X and VOC
Mixed use development ordinance and zones	NO _X and VOC
Encourage or require complementary uses in close proximity in all developments or development areas	NO _X and VOC
Stop freeway bottleneck improvements that add lanes instead of focusing on transit	NO _X and VOC
Prohibit truck use of right lanes for loading on bus and bike routes	NO _X and VOC
Pedestrian mall route diversion	NO _X and VOC
Require two or more occupants per vehicle to enter designated congested activity centers during am and pm peak traffic periods	NO _X and VOC
More transit access near universities and airports	NO _X and VOC
Light rail	NO _X and VOC
Commuter rail	NO _X and VOC
High-speed rail	NO _X and VOC
Encourage the use of jitneys	NO _X and VOC
Encourage putting DART and other public buses on an accelerated turnover schedule to comply with new standards	NO_X
Subsidize transit service	NO _X and VOC
Implement seamless public transit, connectivity	NO _X and VOC
Mandatory employer trip reduction programs for all employers who employ 20 or more people	NO _X and VOC
Restrict student drivers to high schools	NO _X and VOC
Engine software upgrade (DHV4) or low NO _X software upgrade	NO_X
School bus idling Airborne Toxic Control Measure	NO_X
Statewide emissions testing	NO _X and VOC
Centralized IM-240 test with repairs done separately	NO _X and VOC
Raise the driving age	NO _X and VOC
Electric vehicles	NO _X and VOC
Cleaner diesel fuel	NO_X
Some diesel fuels have improved performance beyond TxLED	1,Οχ
Permit HOV lane use by qualifying low emission vehicles	NO_X

Concept Description	Pollutant
Single Occupant Vehicles (SOV) access to HOV and transit stations	
Provide direct freeway access to adjoining HOV or transit park-and-ride facilities to encourage use and expedite access	NO_X
Managed lanes to accommodate some SOVs in HOV lanes	NO _X
• Permit limited use of HOV lanes by SOV using tolls or other limiting technique in highly congested corridors where speeds are below 20 miles per hour	
Rewards for reporting smoking or high emitting vehicles	NO_X
Enforce smoking vehicle reports and require repairs	NO_X
Require vehicle to be retested	NO_X
Low-interest financing for low income and/or old vehicle trade-ins	
• Financing made available to vehicle owners not eligible for Drive a Clean Machine replacement option	NO _X and VOC
Aggressive driving enforcement	NO _X and VOC
Incentive for infill and redevelopment	NO and VOC
Incentives for master planned communities planned around lower vehicle travel	NO _X and VOC
Reduce transit fares	NO _X and VOC
Accelerate rail expansion	NO _X and VOC
Share hybrid vehicles	NO _X and VOC
Enhanced enforcement for Smoking Vehicle Program	NO _X
Vehicle impounding for violators	
Idling Reduction	NO_X
Disincentives such as fines if caught mowing during Ozone Alerts	VOC
Ban equipment such as two-stroke engines	VOC
Electrification of rail	NO_X
Aircraft vapor recovery	VOC
Use electric or cleaner technology auxiliary power units (APUs) for gate electrification	NO _X and VOC
Use electric or cleaner technology APUs for preconditioned air	NO _X and VOC
Use liquefied natural gas and compressed natural engines for locomotives	NO_X
Selective catalytic reduction for locomotives	NO_X
Texas Emissions Reduction Plan (TERP)	NO_X