

REMARKS PREPARED FOR DELIVERY BY
STEVEN A. BARSONY
DIRECTOR, OFFICE OF
ENGINEERING EVALUATIONS
URBAN MASS TRANSPORTATION ADMINISTRATION

AT THE

AMERICAN PUBLIC TRANSIT ASSOCIATION'S
1990 BUS CLEAN AIR WORKSHOP
APRIL 17 - 20, 1990
LOS ANGELES, CA.

UMTA'S ALTERNATIVE FUELS INITIATIVE PROGRAM

THANK YOU FOR YOUR KIND INTRODUCTION. I WOULD ALSO LIKE TO THANK THE AMERICAN PUBLIC TRANSIT ASSOCIATION FOR PROVIDING UMTA THIS OPPORTUNITY TO ADDRESS YOU ABOUT OUR ALTERNATIVE FUELS AND CLEAN AIR PROGRAM.

I BRING WARM GREETINGS FROM OUR ADMINISTRATOR BRIAN CLYMER. HE CONGRATULATES APTA FOR ITS INITIATIVE IN CONVENING THIS SERIES OF VERY TIMELY WORKSHOPS IN VIEW OF THE ON-GOING DEBATE IN CONGRESS CONCERNING THE VARIOUS CLEAN AIR ACT AMENDMENTS.

THE QUALITY OF THE AIR THAT WE BREATHE IS A MAJOR ISSUE AS COMMUNITIES ALL ACROSS AMERICA ARE FACING A CRISIS IN TERMS OF TRAFFIC CONGESTION, WHICH IS STRANGLING OUR MOVEMENTS IN OUR URBAN AND SUBURBAN AREAS, AND NOXIOUS EMISSIONS WHICH ARE CHOKING THE VERY AIR THAT WE BREATHE AND POLLUTING THE ENVIRONMENT. THESE EMISSIONS HAVE SERIOUS IMPACTS ON THE VITALITY OF OUR AMERICAN CITIES AND THE WELL-BEING OF OUR FELLOW MEN.

THIS IS NOT A NEW PROBLEM THAT HAS JUST BEEN RECENTLY UNCOVERED. RATHER, THE IMPORTANCE WAS RECOGNIZED ALMOST TWO DECADES AGO WITH THE PASSAGE OF THE NATIONAL ENVIRONMENTAL POLICY ACT IN 1970. YET, WITH THE 20TH ANNIVERSARY OF EARTH DAY ONLY A FEW DAYS AWAY, 100 METROPOLITAN AREAS STILL FACE POTENTIAL SANCTIONS FOR FAILING TO MEET THE ENVIRONMENTAL PROTECTION AGENCY'S STANDARDS FOR OZONE AND CARBON MONOXIDE.

FURTHERMORE, IT IS BECOMING MORE WIDELY RECOGNIZED THAT THIS IS MORE THAN SIMPLY A DOWNTOWN PROBLEM. 44 STATES HAVE BEEN INFORMED BY EPA THAT THEY MUST TAKE STEPS TO MITIGATE MOTOR VEHICLE POLLUTION BECAUSE THEY FAIL TO MEET THE CLEAN AIR STANDARDS. AS THE DISTINCTION BETWEEN URBAN AND SUBURBAN HAS BECOME BLURRED, WE HAVE COME TO THE REALIZATION THAT THIS IS REALLY NOT ONLY A REGIONAL PROBLEM, BUT IN FACT A NATIONAL PROBLEM.

NEVERTHELESS, WE ALL RECOGNIZE THAT AMERICA'S LOVE AFFAIR WITH THE AUTOMOBILE IS A NATIONAL PHENOMENA, THAT IS UNLIKELY TO CHANGE DRASTICALLY.

I FEEL AS IF I'M PREACHING TO THE ALREADY CONVERTED. WE IN THE TRANSIT INDUSTRY RECOGNIZE THAT ONE OF THE GREATEST CONTRIBUTOR TO OUR AIR QUALITY PROBLEM IN URBAN AREAS IS EMISSIONS FROM MOTOR VEHICLES. IN 1988, AMERICANS TRAVELED 2 TRILLION VEHICLE MILES-- MORE THAN TRIPLE THE TRAVEL MILEAGE IN 1956. THIS CONTINUED GROWTH IN VEHICLE MILES TRAVELED IS EXPECTED TO OFFSET CURRENT HIGHWAY CONGESTION RELIEF MEASURES AND IMPROVEMENTS IN VEHICLE POLLUTION CONTROL TECHNOLOGY.

ONE SOLUTION TO REDUCING AIR POLLUTION LEVELS WOULD BE TO SHIFT TRAVEL BEHAVIOR TOWARD HIGHER OCCUPANCY VEHICLES SUCH AS TRANSIT. IF ONE AUTO COMMUTER WOULD USE PUBLIC TRANSIT TO GO TO WORK INSTEAD OF DRIVING, IT WOULD REMOVE 9 POUNDS OF HYDROCARBONS, 63 POUNDS OF CARBON MONOXIDE, 5 POUNDS OF NITROUS OXIDES, AND 1 POUND OF PARTICULATES, ON AN ANNUAL BASIS. A FULL BUS DURING RUSH HOUR REMOVES 40 CARS FROM THE TRAFFIC STREAM, A FULL RAIL CAR - 75 TO 125 CARS, AND A FULL VAN - 13 CARS. I AM SURE YOU HAVE HEARD THIS BEFORE, THESE STATISTICS COME FROM THE APTA TRANSIT 2000 TASK FORCE FINAL REPORT.

EPA IS CHARGED WITH THE RESPONSIBILITY OF SETTING EMISSIONS STANDARDS THAT WILL MOVE THE NATION TO CLEANER AIR IN OUR CITIES. FOR A NUMBER OF REASONS, EPA HAS ESTABLISHED TOUGH EMISSION STANDARDS FOR NEW TRANSIT BUSES PURCHASED IN 1991 AND THEREAFTER. TRUCKS ARE NOT REQUIRED TO MEET THESE SAME STANDARDS UNTIL 1994. HOWEVER, ACHIEVING THESE STANDARDS IS PROVING EXTREMELY DIFFICULT.

NEVERTHELESS, WE BELIEVE THAT THESE STANDARDS CAN BE MET. SUCCESS WILL DEPEND ON A COMPREHENSIVE, COORDINATED AND WELL MANAGED APPROACH WITH A STRONG AND IMAGINATIVE MANAGEMENT THAT IS WILLING TO INTEGRATE THE LATEST TECHNOLOGY IN EMISSIONS CONTROL, SUCH AS THE USE OF ALTERNATIVE FUELS AND CLEAN DIESEL WITH PARTICULATE TRAPS. SUCCESS WILL NOT COME EASY, IT WILL REQUIRE THE COMBINED EFFORTS OF ALL LEVELS OF GOVERNMENT AND THE TRANSIT INDUSTRY, INCLUDING THE PRIVATE SECTOR.

IN THIS CASE, THE GOVERNMENT/UMTA INITIATED AS A FIRST STEP AN ALTERNATIVE FUELS INITIATIVE PROGRAM IN SEPTEMBER OF 1988. THE PROGRAM IS AIMED AT MOVING ALTERNATIVE FUELED VEHICLES INTO THE MAINSTREAM OF TRANSIT REVENUE SERVICE. THE AFI PROGRAM IS INTENDED TO:

1. ENCOURAGE THE ADOPTION OF ALTERNATIVE FUELS IN A WIDE RANGE OF TRANSIT APPLICATIONS TO IMPROVE AIR QUALITY, REDUCING THE NATION'S DEPENDENCY ON FOREIGN SOURCES OF ENERGY AND INCREASING THE USE OF AMERICA'S NATURAL AND RENEWABLE ENERGY SOURCES.
2. ENHANCE URBAN AND SUBURBAN MOBILITY THROUGH THE INCREASED USE OF NON-POLLUTING TRANSIT SERVICES.
3. ENCOURAGE THE CREATION OF NEW JOBS THROUGH THE EXPANSION OF ALTERNATIVE FUEL PRODUCTION AND MARKETS.
4. ENCOURAGE PRIVATE ENTREPRENEURIAL OPPORTUNITIES FOR THE UTILIZATION OF NEW TRANSIT SERVICES USING ALTERNATIVE FUELS. AND,
5. DEMONSTRATE THAT ALTERNATIVE FUELS ARE SAFE AND COST EFFECTIVE FOR A WIDE RANGE OF TRANSIT APPLICATIONS.

TO DATE WE HAVE RECEIVED 65 INQUIRIES FOR OVER 700 ALTERNATIVE FUELED VEHICLES. OF THESE, 49 ARE FORMAL APPLICATIONS FOR 500 ALTERNATIVE FUELED VEHICLES. WE HAVE ALREADY APPROVED 23 OF THESE APPLICATIONS FOR 219 VEHICLES TOTALING OVER \$31 MILLION. OF THAT TOTAL, THE STATES ARE CONTRIBUTING MORE THAN \$1.5 MILLION, THE PRIVATE SECTOR ALMOST \$3 MILLION, AND OVER \$5 MILLION COMES FROM THE LOCAL SHARE. WITH NEARLY ONE-THIRD OF THE COSTS COMING FROM NON-FEDERAL SOURCES, WE CAN TRULY SAY THAT THIS IS A COOPERATIVE VENTURE. UMTA'S CONTRIBUTION HAS BEEN \$16.8 MILLION FROM SECTION 3 AND \$5.3 MILLION FROM SECTION 9.

THE BREAKDOWN IN VEHICLE TYPES IS VERY INTERESTING: ALMOST 60% ARE CNG VEHICLES; 7% ARE METHANOL VEHICLES; AND 12% ARE ETHANOL VEHICLES. THE REMAINING 21% IS UNDECIDED AS TO WHICH ALTERNATIVE FUEL THEY WILL USE. THE OVERWHELMING CNG REQUESTS REFLECTS THE ACTIVE MARKETING BY THE NATURAL GAS INDUSTRY AS WELL AS THE CORN GROWERS ASSOCIATIONS (ETHANOL) AND SHOWS A LACK OF SUCH MARKETING BY THE METHANOL PRODUCERS. THIS IS NOT MEANT TO BE A CRITICISM, BUT MERELY AN OBSERVATION. FOR THIS FISCAL YEAR, WE EXPECT TO AWARD MANY ADDITIONAL GRANTS AND WE ALSO EXPECT TO RECEIVE MANY NEW APPLICATIONS.

MANY OF YOU MAY KNOW THAT PRIOR TO OUR AFI PROGRAM WE HAD ANOTHER COOPERATIVE PROGRAM--NAMESLY THE UMTA METHANOL BUS DEMONSTRATION PROGRAM WHICH BEGAN IN 1983. THIS PROGRAM INCLUDED 59 BUSES DEPLOYED IN SEVEN CITIES ACROSS THE NATION: 2 IN SAN FRANCISCO, 3 IN JACKSONVILLE, 10 IN SEATTLE, 3 IN RIVERSIDE, 6 IN NEW YORK, 30 IN LOS ANGELES, AND 5 IN DENVER. I WOULD LIKE TO EMPHASIS THAT OF THE \$17.5 MILLION TOTAL PROGRAM COST, OVER \$11 MILLION WAS FROM NON-FEDERAL SOURCES.

I AM SURE THAT YOUR ARE AWARE OF SEVERAL ON-GOING TRAP DEMONSTRATION PROGRAMS TO MEET THE 0.1 G/BHP-HR PARTICULATE STANDARD. PHILADELPHIA SEPTA AND DENVER RTD ARE UMTA SPONSORED UNDERTAKINGS, WHERE AS NYCTA IS DOING IT ON ITS OWN. A MONTH AGO WE BRIEFED THE UMTA ADMINISTRATOR ABOUT THE VARIOUS TRAP DEVELOPMENTS HERE AND ABROAD AND UMTA IS SUPPORTING THE USE OF CLEAN DIESEL WITH A PARTICULATE TRAP.

BUT, I BELIEVE WE ARE ALL COGNIZANT THAT THE MAJOR THRUST TODAY IS IN CONGRESS ABOUT THE CLEAN AIR LEGISLATION. AS YOU KNOW, LAST JUNE THE PRESIDENT SENT TO CONGRESS HIS CLEAN AIR ACT AMENDMENT WHICH PROVIDES STRONG DIRECTION WITH REGARD TO THE USE OF ALTERNATIVE FUELS. FOR METROPOLITAN AREAS OF OVER ONE MILLION, ONLY ALTERNATIVE FUELED BUSES MAY BE PURCHASED. A PHASE-IN SCHEDULE WAS PROPOSED OF TEN PERCENT IN 1991, TWENTY-FIVE PERCENT IN 1992, SIXTY PERCENT IN 1993, AND ONE HUNDRED PERCENT IN 1994 AND THEREAFTER.

THIS SCHEDULE WOULD RESULT IN THE INTRODUCTION OF OVER 2000 ALTERNATIVE FUELED BUSES PER YEAR BY 1994. THE PRESIDENT'S PROPOSAL WOULD MAKE THE 1991 EPA PARTICULATE EMISSION STANDARD 0.25 G/BHP-HR FOR THOSE TRANSIT BUSES NOT REQUIRED TO BE ALTERNATIVE FUELED. THE PRESIDENT'S PROPOSAL WOULD BRING THE STANDARDS FOR BUSES AND TRUCKS INTO CONFORMANCE FOR 1991 AND 1994, WHILE PHASING IN ALTERNATIVE FUELS. WE BELIEVE THIS IS FAIR AND REASONABLE.

LAST MONTH THE SENATE PASSED ITS VERSION OF THE CLEAN AIR ACT AMENDMENT. THE SENATE VERSION ADOPTS THE PHASE-IN OF "LOW POLLUTING FUELS", BUT DOES NOT CHANGE EPA'S 1991 PARTICULATE EMISSION STANDARD OF 0.1 G/BHP-HR FOR THOSE BUSES NOT REQUIRED TO BE ALTERNATIVE FUELED. THE HOUSE VERSION IS STILL UNDER CONSIDERATION. ITS PHASE-IN SCHEDULE FOR "CLEAN ALTERNATIVE FUELS" WOULD BE DELAYED ONE YEAR OVER THAT PROPOSED BY THE PRESIDENT AND THE SENATE. IT ALSO ADDS CLEAN DIESEL FUEL TO THE LIST OF CLEAN ALTERNATIVE FUELS. THE BIG DIFFERENCE IN ADDITION TO THE 1 YEAR LATER START AND THE ADDITION OF CLEAN DIESEL IS THAT IT WOULD BE APPLICABLE TO METROPOLITAN AREAS OF 750,000 OR OVER IN POPULATION. IT WOULD ROLL-BACK THE PARTICULATE EMISSION STANDARDS FOR BUSES TO 0.25 G/BHP-HR IN 1991-1993. IT WOULD REQUIRE THE TOUGHER 0.1 G/BHP-HR IN 1993 FOR THOSE BUSES REQUIRED TO BE CLEAN FUELED AND FOR ALL BUSES IN 1994 AND THEREAFTER.

LET ME EMPHASIZE THAT NEITHER THE PRESIDENT'S PROPOSAL NOR UMTA'S PROGRAM FAVOR THE USE OF ONE SPECIFIC CLEAN FUEL OVER ANOTHER. BOTH ESTABLISH A LEVEL PLAYING FIELD FOR ALL CLEAN FUELS INCLUDING "METHANOL, ETHANOL, NATURAL GAS, PROPANE, ELECTRICITY OR OTHER MOTOR VEHICLE FUEL OR POWER SOURCE." LET ME ALSO ADD THAT SECRETARY SKINNER IS SYMPATHETIC TO APTA'S PROPOSAL TO ALLOW CLEAN DIESEL ENGINE SYSTEMS AS WELL AS ALTERNATIVE FUELED SYSTEMS TO BE USED IN URBAN BUSES. HE HAS SO EXPRESSED IT TO YOUR EXECUTIVE VICE PRESIDENT, JACK GILSTRAP. I BELIEVE THAT THE DECISION AS TO WHICH CLEAN FUEL A TRANSIT AUTHORITY WANTS TO USE SHOULD BE A LOCAL DECISION BASED ON DESIRE, ECONOMIC MARKET FORCES, AND NOT BY FEDERAL LEGISLATION.

I AM CONVINCED THAT THE CLEAN AIR ACT AMENDMENT WILL BE PASSED IN THE NEAR FUTURE IN THE HOUSE AND THAT IT WILL INCLUDE THE AIR QUALITY GOALS THAT PRESIDENT BUSH HAS SET. IT WILL NOT BE EASY. WE ALL RECOGNIZE THAT CHANGES ARE HARD TO LIVE WITH AND THAT ANY TRANSITION TO NEW FUELS, EVEN A PARTIAL ONE, WILL REQUIRE ADJUSTMENT ON THE PART OF THE TRANSIT AUTHORITIES. THE TRANSIT INDUSTRY HAS A VAST EXPERIENCE WITH THE USE OF DIESEL FUEL, BUT HAS VERY LITTLE WITH ALTERNATIVE FUELS. WE ARE AWARE OF THE INFRASTRUCTURE ISSUES THAT NEED TO BE ADDRESSED AND HAVE EVERY INTENTION TO ASSIST THE TRANSIT INDUSTRY IN DEVELOPING ANSWERS TO THEM. ADMINISTRATOR CLYMER'S OPENING REMARKS BEFORE THE HOUSE SUBCOMMITTEE ON APPROPRIATIONS EARLIER THIS MONTH, HE SPECIFICALLY NOTED THAT A SPECIAL PRIORITY FOR SECTION 3 BUS FUNDS WILL BE THE

DEVELOPMENT AND IMPLEMENTATION OF NEW ALTERNATIVE FUEL TECHNOLOGIES.

PRESENTLY THERE ARE OVER 550 TRANSIT BUS FACILITIES SERVING OVER 300 TRANSIT AGENCIES. MORE IMPORTANTLY, OVER EIGHTY PERCENT OF OUR NATION'S TRANSIT AGENCIES OPERATE OUT OF A SINGLE FACILITY. THOSE WITH MULTIPLE FACILITIES CAN MORE EASILY PHASE-IN CONVERSION. THOSE WITH SINGLE FACILITIES WILL HAVE TO INITIATE DUEL FUELING DURING A TRANSITION PHASE AND THIS COULD CAUSE SOME COMPLEX OPERATING PROBLEMS. WE ARE AWARE, AND I AM SURE THAT YOU ARE AS WELL, OF THE CAPITAL INVESTMENT THAT WILL BE NEEDED TO CONVERT EXISTING TRANSIT FACILITIES SO THAT THEY MAY SAFELY OPERATE AND MAINTAIN AN ALTERNATIVE FUELED FLEET.

WE ARE AWARE THAT THE CHANGE TO ALTERNATIVE FUELS MAY RESULT IN CHANGES IN ESTABLISHED TRANSIT OPERATING PROCEDURES. BEFORE ONE CAN MAKE THESE CHANGES, THE INDUSTRY WILL NEED TO EVALUATE THE IMPACT OF THESE CHANGES. WE ARE PREPARED TO ASSIST YOU, WORK WITH YOU AND KEEP YOU INFORMED WITH REGARD TO WHAT WE HAVE LEARNED, BUT IT WILL BE YOUR DECISION IN EACH CASE. AS AN EXAMPLE, THE OVERNIGHT REFUELING OF CNG BUSES USING SLOW FILL MAY BE ACCEPTABLE TO ONE TRANSIT OPERATOR, BUT NOT TO ANOTHER WHO DESIRES A FAST FILL TO SATISFY ITS SPECIFIC NEEDS.

SIMILARLY, OUTDOOR BUS STORAGE MAY BE ACCEPTABLE IN CERTAIN CITIES WITH WARM CLIMATES, WHEREAS INDOOR BUS STORAGE IS THE NORM IN COLD WEATHER CITIES. HYPOTHETICALLY, THE CONVERSION OF AN OUTDOOR BUS STORAGE FACILITY MIGHT COST AROUND \$1 MILLION FOR A 150 VEHICLE OPERATION, WHEREAS AN INDOOR STORAGE FACILITY MIGHT COST AROUND \$2.5 MILLION.

THE TRANSITION TO THE USE OF ALTERNATIVE FUELS MAY BE IMPEDED BY LOCAL REGULATIONS AND RESTRICTIONS THAT MAY OR MAY NOT BE WARRANTED. CURRENTLY, THERE ARE NO SPECIFIC FEDERAL REGULATIONS OR STANDARDS THAT APPLY TO ALTERNATIVE FUELS IN A MOTOR VEHICLE FUEL SYSTEM. WE HAVE BEEN WORKING CLOSELY WITH THE NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION ON THIS ISSUE. WE EXPECT THAT NHTSA WILL ISSUE AN NPRM ON THIS ISSUE BY THE SUMMER OF THIS YEAR.

UMTA WILL DO ALL IN ITS POWER TO ENSURE THAT THE HEALTH AND SAFETY OF TRANSIT'S WORKERS ARE NOT COMPROMISED IN ANY WAY BY THE INTRODUCTION OF ALTERNATIVE FUELS. WE WILL ASSIST YOU IN ESTABLISHING APPROPRIATE TRAINING TO ALLEVIATE MISCONCEPTIONS AND TO ENSURE SAFE OPERATIONS.

SOME HAVE CONSIDERED ALTERNATIVE FUELS TO BE A CURE-ALL WHICH WILL MAGICALLY PROVIDE URBAN AND SUBURBAN MOBILITY, CLEAN OUR NATION'S AIR, AND PROVIDE US WITH ENERGY INDEPENDENCE. GREAT PROGRESS HAS BEEN MADE IN DEVELOPING THE NECESSARY TECHNOLOGY TO MAKE ALTERNATIVE FUELED TRANSIT BUSES A REALITY.

HOWEVER, WE NEED TO BE REALISTIC. IT IS NOT A PANACEA FOR EVERYTHING. WE MUST REALIZE THAT THIS TECHNOLOGY IS NOT FULLY MATURE. WHEREAS THE DIESEL TECHNOLOGY HAS HAD 60 TO 70 YEARS OF EXPERIENCE, ALTERNATIVE FUEL TECHNOLOGY HAS REALLY JUST STARTED. IN COOPERATION WITH DOE, WE ARE IN THE PROCESS OF ESTABLISHING A COMPREHENSIVE PLAN FOR THE DATA COLLECTION, ANALYSIS, AND EVALUATION OF OUR ALTERNATIVE FUELS PROJECTS. ALSO, A PORTABLE EMISSIONS TEST UNIT WILL BE DEVELOPED.

THE PRESIDENT'S PROPOSED PHASE-IN SCHEDULE IS A REALISTIC APPROACH THAT PROVIDES THE OPPORTUNITY FOR THE TECHNOLOGY TO MATURE. IT ALSO PROVIDES THE NECESSARY PUSH TO MOVE THOSE WHO HAVE SOUGHT TO DELAY AND DRAG THEIR FEET.

THERE IS CERTAINLY MUCH TO BE DONE BEFORE WE REACH THE DAY WHERE A NON-POLLUTING BUS IS THE NORM RATHER THAN THE EXCEPTION. WE WELCOME THE OPPORTUNITIES, AND THE CHALLENGES; AND WE BELIEVE THE TRANSIT INDUSTRY DOES AS WELL. WE BELIEVE THAT THIS ISSUE REQUIRES A STRONG PUBLIC AND PRIVATE COOPERATION. WE MUST BRING ABOUT A SOLUTION THAT DOES NOT DISRUPT NOR BANKRUPT OUR ABILITY TO PROVIDE TRANSIT SERVICE FOR THE PUBLIC.

LET ME CONCLUDE MY REMARKS BY SAYING THAT I HOPE THAT WE CAN CONTINUE TO HAVE THE SUPPORT OF THE TRANSIT INDUSTRY AS WE MOVE TOGETHER TOWARDS THAT IMPORTANT GOAL.

THANK YOU.

DOT LIBRARY



00399290