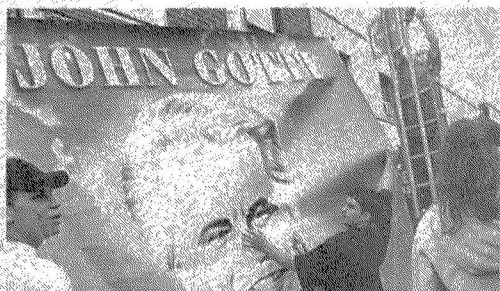


CITY



Photographs by Suzanne DeChillo/The New York Times

Onlookers reached out to touch the hearse carrying John J. Gotti's body yesterday as it passed the Bergin Hunt & Fish Club in Ozone Park, near where Annamarie Gonzales, right, stood and wept. Residents raised a banner at 101st Avenue and Woodhaven Boulevard.



R E G I O N

New York's Bus Cleanup Brings Other Cities On Board

By RANDY KENNEDY

Two years after the Metropolitan Transportation Authority and state lawmakers struck a landmark deal to clean up what comes out of the tailpipes of the city's 4,500 buses, the results are beginning to be seen — or more accurately, not seen — around the city.

Along Madison Avenue, plied by so many buses that environmental officials installed an air monitor there in the late 1980's to track the high levels of diesel soot, it is now hard to spot a city bus trailing even a modest cloud of black smoke.

The reason can be found at a cavernous bus garage in the Bronx, where over the last several months transit mechanics and engineers have been completely rebuilding the guts of the city's oldest and most polluting diesel buses, installing cleaner, custom-made engines and placing powerful filters on the exhaust pipes.

The improvements to the buses, and New York City Transit's decision in the fall of 2000 to switch to a special ultra-low-sulfur diesel fuel, has resulted in a strange situation for transit officials: environmentalists, the same ones who hounded them relentlessly for years to clean up bus emissions, are actually happy with them now, and seem impressed by the progress the agency has made toward meeting the goals set in Albany to improve the city's air.

But more important than that, environmentalists say, is the ripple effect that the agency's actions have had across the country in fights to make other bus fleets more environmentally friendly.

The authority, as the 800-pound gorilla of the nation's mass transit services, does more than influence other agencies' decisions, transit officials and environmentalists say. It virtually creates its own market for cleaner vehicles and fuels.

When the authority agreed to use ultra-low-sulfur diesel two years ago, for example, it was not widely available in mass quantities in the United States, and the Environmental Protection Agency would not start requiring production of it until 2006. New York transit officials, in fact, thought they might have to import it



Librado Romero/The New York Times

John Walsh, chief of maintenance for M.T.A. buses, right, and William Livingston, assistant chief, with the new, cleaner diesel engines.

Turning a soot-belching fleet into a pollution-control role model.

from Rotterdam.

But when a bus fleet that buys 42 million gallons of fuel a year — as the authority does — decides it wants to start buying ultra-low-sulfur diesel, it is a good bet that fuel companies will start to produce it, and they did.

In turn, this made it easier for other bus fleets around the country to begin using it. Last fall, for example, the District of Columbia's fleet of 1,400 buses switched, estimating that the change would reduce the amount of particulate matter — tiny, potentially dangerous soot particles that can lodge in the lungs — by about 17 tons per year from the buses. Boston made the switch this year, as did New Jersey Transit.

The switch is important not only because the new fuel reduces the

amount of soot particles and airborne sulfur, a component of ozone and smog. But it also makes it possible for the rebuilt New York City buses to use complex exhaust filters, which are about the size of a small keg of beer and are concealed inside the back engine compartment.

The filters — which reduce particle emissions even more, making diesel buses almost as clean in many respects as natural gas buses — would not work with regular diesel fuel, because the soot particles created clogs.

"I think the M.T.A.'s commitment to cleaning up its bus fleet has had huge repercussions with virtually every other large bus fleet in the country," said Richard Kassel, a senior lawyer for the Natural Resources Defense Council, one of the groups that pushed hardest for the change. "It was probably more important than the M.T.A. ever realized. I am now seeing fleets that fought like crazy not to change starting to change."

Millard L. Seay, who oversees bus service for New York City Transit, said that the agency has continued, as part of its agreement with the

state, to expand its fleet of natural gas buses and those known as hybrid electrics, which use small diesel engines to power electric motors attached to the wheels.

But Mr. Seay added that advances in cleaning diesel emissions have come so rapidly, just in the last two years, that it is not altogether clear which kind of fuel will emerge as the best choice for the environment. Natural gas engines, for instance, still produce some carbon dioxide, a significant greenhouse gas, and nitrogen oxide, a component of smog.

So far, the authority is operating 221 natural gas buses, and plans to increase its fleet to 650. There are only 10 of the hybrid buses on the road, in a pilot program, but the agency says it will have 125 delivered by the end of this year and expects to have 400 by 2005.

But the most intense activity now is at a huge repair shop on Zerega Avenue in the Bronx and a smaller one in East New York, Brooklyn, where mechanics are rebuilding about seven of the city's oldest buses every week, junking the old engines and installing new 1,110-pound ones with electronic emission controls and pollution filters.

John Walsh, the authority's chief bus maintenance officer, said that more than 450 of the 572 oldest buses, some with as many as 15 years on the road, have been rebuilt, at a cost of about \$85,000 a bus. Newer buses undergoing routine maintenance are also having filters installed, and work is on schedule to equip every diesel bus with a filter by the end of next year, he said, in keeping with the agency's agreement with the state.

Surveying the work last week at the Zerega Avenue garage, Mr. Walsh pointed to a long row of rusty, dingy-looking engines, the old ones, which would soon be bound for the scrapyard. Nearby sat their shiny replacements, customized by the authority after a year of research and design, and soon to bolted into the back of a bus.

"To me," Mr. Walsh said, looking at one of the new motors, "they are a thing of beauty. But there's no accounting for taste."