

Trash and the City

Ramon Cruz

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WTER 2005 Annual Meeting

Columbia University



ENVIRONMENTAL DEFENSE

finding the ways that work

The Problem



Trash and the City

Background – Waste in Manhattan

- Pre-1989 – Manhattan residential and commercial went to Fresh Kills landfill via marine transfer stations (MTSs).
- 1989 – Rise in tipping fees for commercial waste in Fresh Kills landfill
- Resulted in the establishment of poorly planned and regulated private transfer facilities
- 1996 – Decision to close Fresh Kills landfill by 2002
- 2000 – Manhattan's three MTSs were closed
- 2004 – New DSNY SWMP and Commercial Study – commercial waste and recyclables might be exported via MTS



Diesel air pollution:



- Worsens asthma
- Adds to cancer risk all around New York
- Major source of harmful fine particles
- Contributes to harmful smog levels

The Asthma Epidemic



- 1 in 8 New Yorkers
- 300,000 Children
- 700,000 Adults
- 22% Dangerous Days of Summer
- Asthma Hot Spots

Truck-Based Waste Transfer Stations

Concentrated in Northern Brooklyn and South Bronx



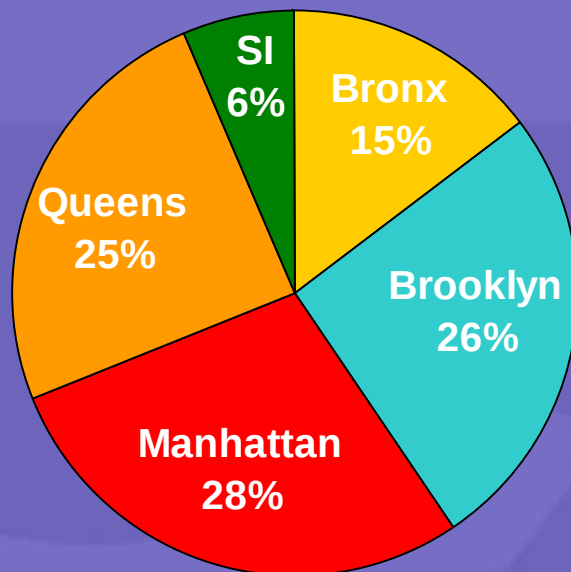
Photo: Sustainable South Bronx



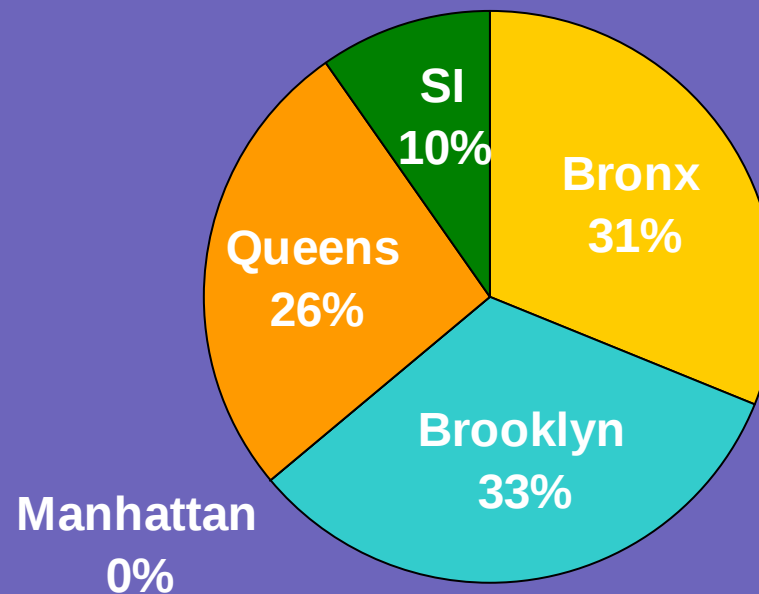
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Waste Generation and Transfer Capacity by Borough

Waste Generation



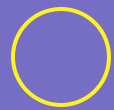
Waste Transfer Stations



Problems with truck-based waste transfer stations

- Contributes to roadway congestion
- Poorly regulated and poorly planned
- Queuing of trucks
- Diesel emissions
- Odors from trucks and from transfer stations
- Idling of engines in residential streets
- Truck not following assigned routes
- Violations include not closing gates to stations and not covering private collection trucks

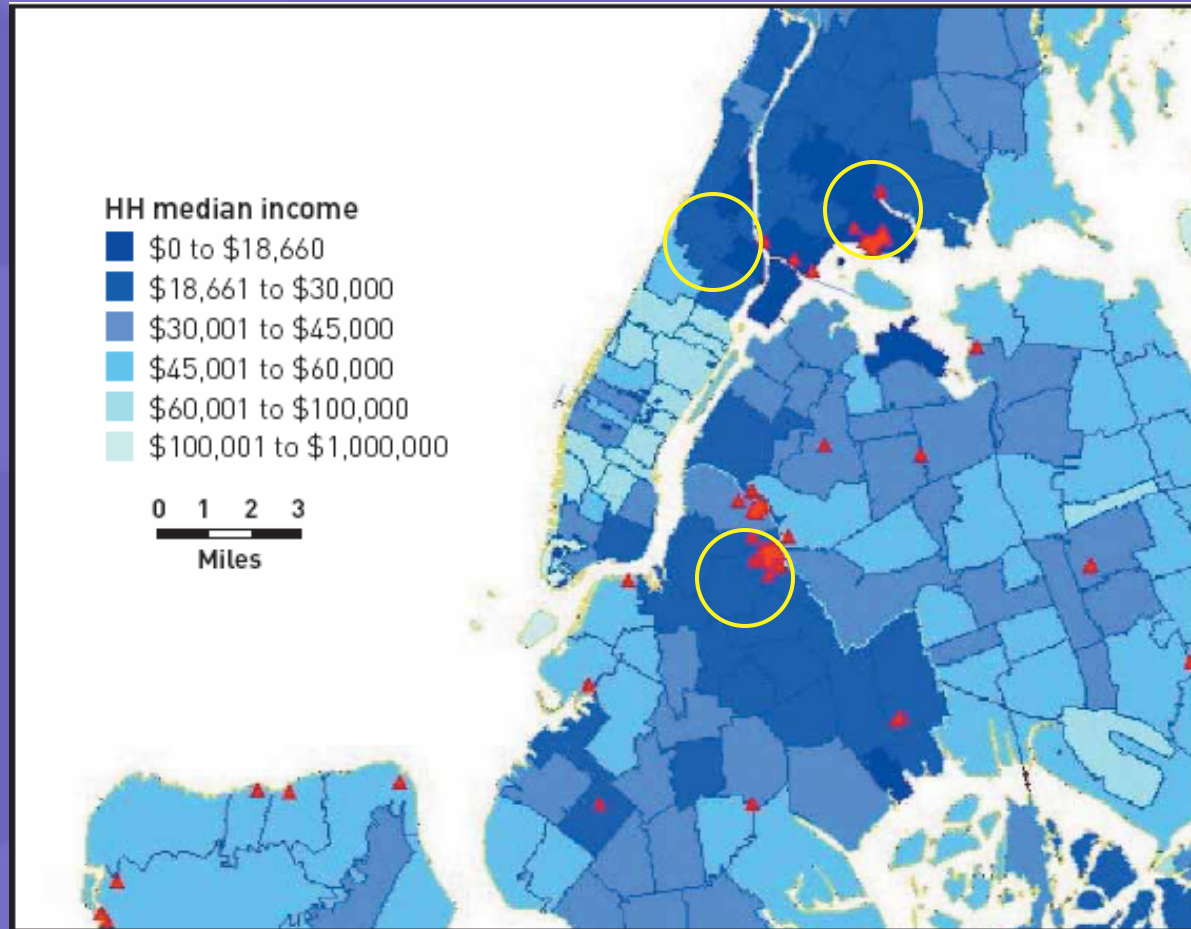
Asthma, Poverty and Truck-Based Waste Transfer Stations



Asthma
Hot Spots



Waste Transfer
Stations



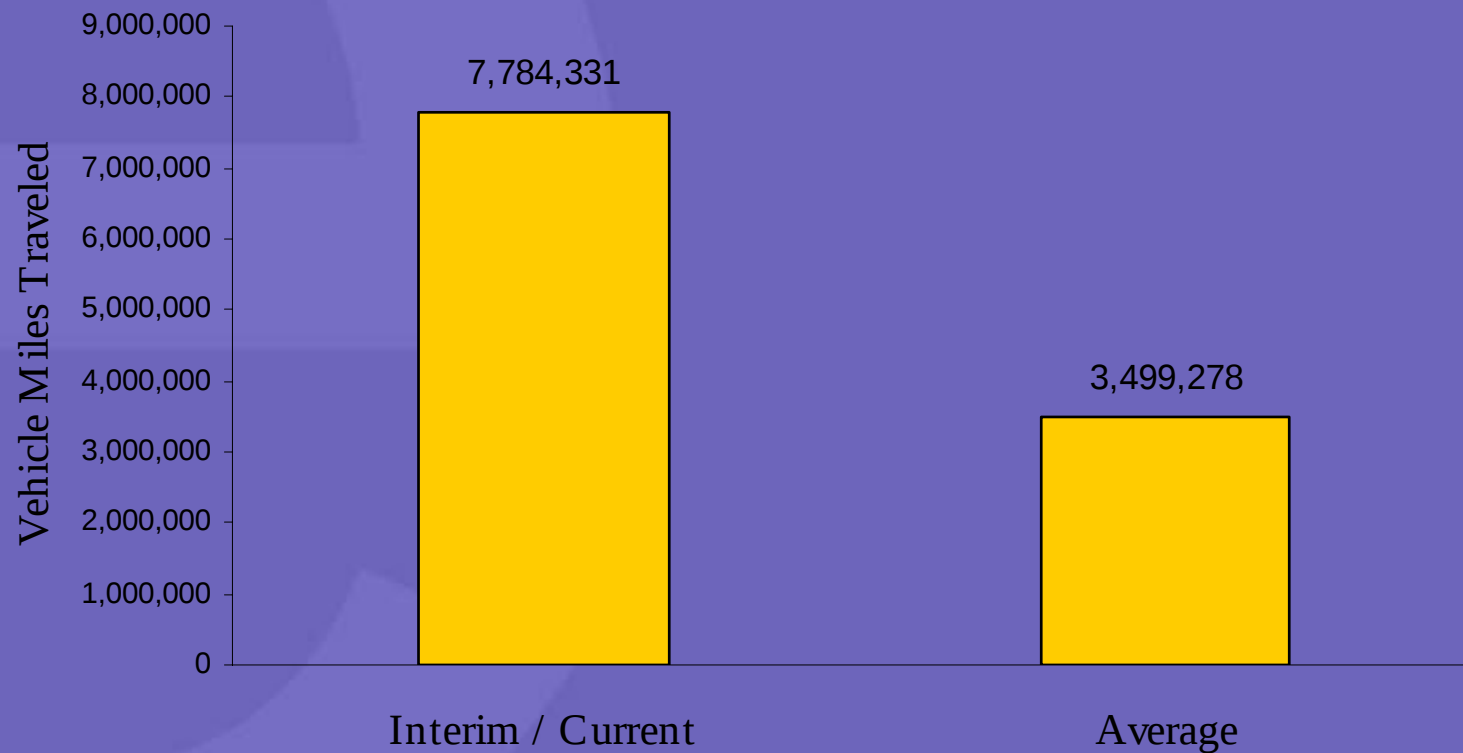
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South Bronx:
40% of City's waste
transfer stations



Cutting Truck Traffic in Half



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Solution:

How to get 50% truck traffic reduction

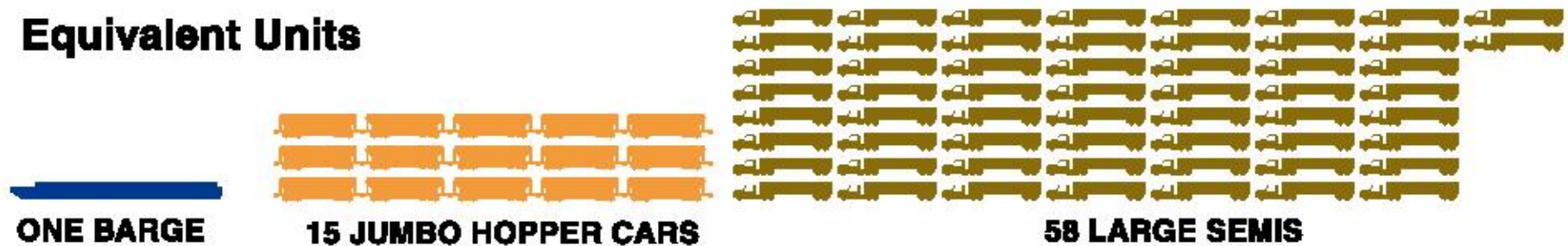
Open the Manhattan Waterfront

- Shift from truck to barge and rail
- Integrate residential and commercial waste streams
- Shut the worst truck-based facilities

COMPARE:

Source: Iowa Department of Transportation - 800 Lincoln Way - Ames, IA 50010 • 515-228-1372

Equivalent Units



Equivalent Lengths





Cutting Truck
Traffic in Half

Trash and the City Report

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TOWARD A CLEANER, MORE EQUITABLE
WASTE TRANSFER SYSTEM IN MANHATTAN

EXECUTIVE SUMMARY

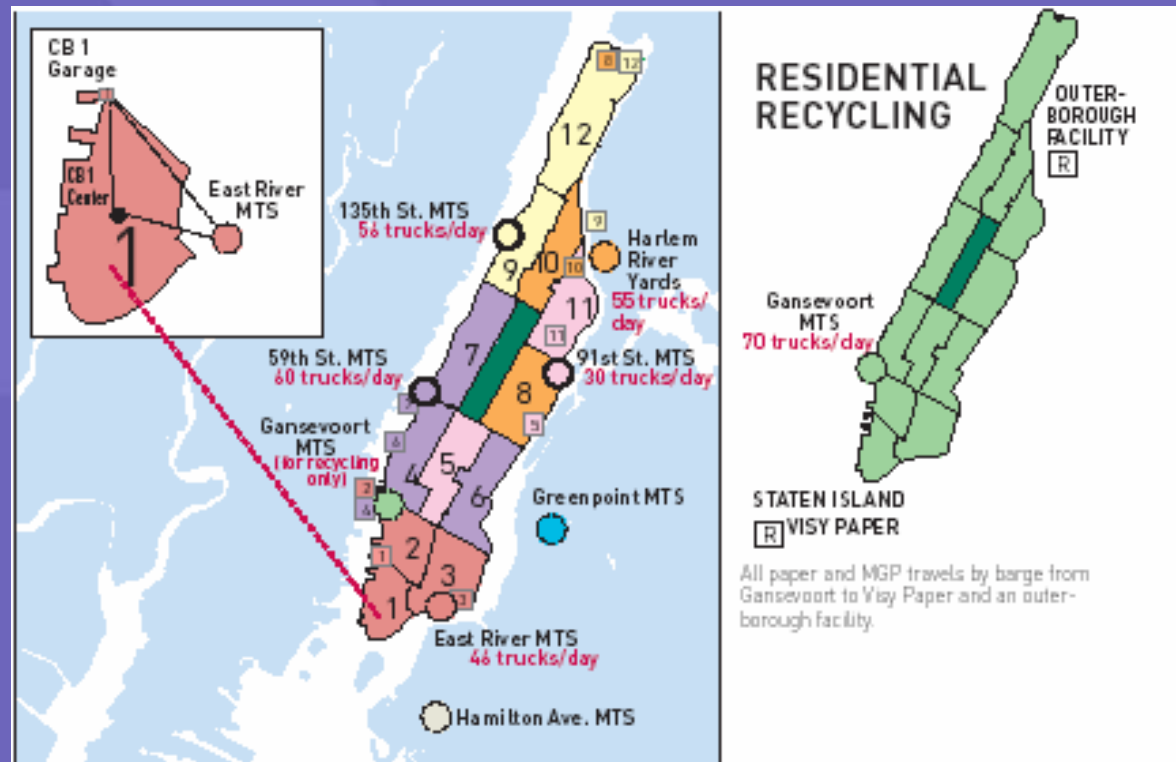


ENVIRONMENTAL DEFENSE
finding the ways that work

- Proposed 10 alternative scenarios
- Calculated truck reductions
- Advanced solutions to community concerns

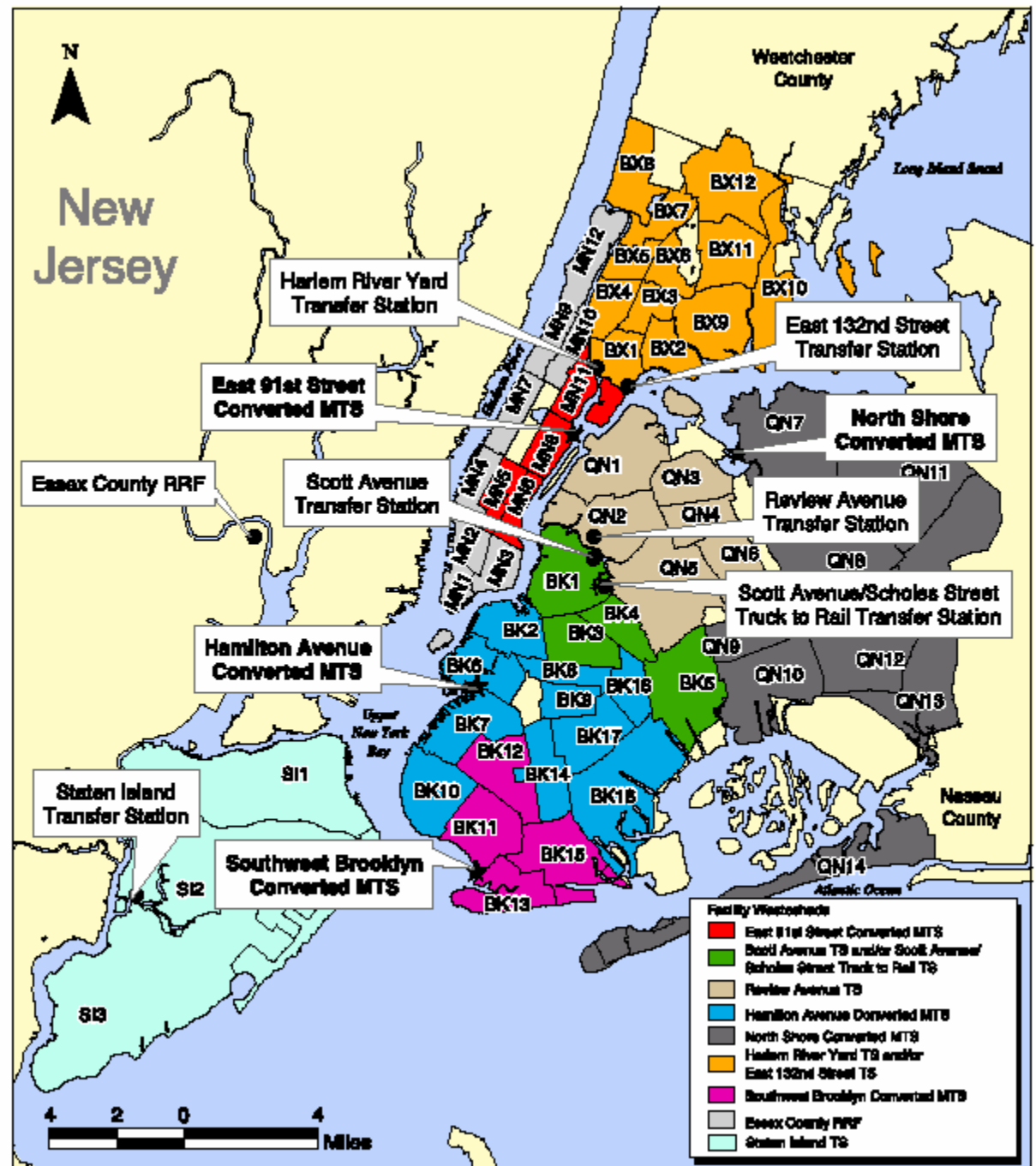
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Open the waterfront to marine transfer stations closer to waste generation centers



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Proposed Long-Term Export Facilities and Wastesheds



Main Obstacle: Community Opposition

- NIMBY Attitude
- Truck Queuing in the Neighborhood
- Diesel emissions, Odor
- Aesthetically unappealing



Getting to Yes: Addressing Community Concerns

1. New Designs, New Standards

- Build green state-of-the-art facilities
- Reduce truck queuing
- Higher performance standards

2. Cleaner Truck Technologies

- City and private fleets



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- On-site queuing, reduced idling
- Clean air, energy and water technology
- Education and viewing facilities
- Integration into public waterfront



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Gansevoort Peninsula: in the heart of Hudson
River Park on Manhattan's West Side



Hudson River Waterfront -- 1998



Hudson River Park - 2003





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Turning a NIMBY into a YIMBY: Placing a transfer station as part of a waterfront park



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Questions & Comments

