

# POPULATION: ITS ECOLOGICAL FOOTPRINT AND THE NYC STEADY STATE

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## THE MISSION:

Population's role in reducing the Ecological Footprint

Population factors into the Ecological Footprint equation not just as a quantifiable head count, but as the qualitative behavior of its number. Population control can be achieved by (1) asking nicely: the ecological footprint study has been realized into a footprint network outreach with public awareness as its goal, or (2) by policy mandates: zero or even negative population growth laws. However, posing New York as a shrinking city or expecting its administration to encourage a smaller population is unlikely. New York has a continued tradition of growing particularly via immigrant populations (the 2000 census counted a population of 8.1 million people including 2.9 foreign born residents – the largest ever). In accordance with this trend, the solution for a smaller footprint lies, not in a reduced population, but in a qualitatively improved population ecology; One that is better behaved.

$$EFp = N (ef)$$

The ecological footprint (EFp) is obtained by multiplying the average per capita footprint (ef) by the population size (N). (Wackernagel 66).

## PARADIGM SHIFT

The Rich Need Not Apply

Better behavior spells change for our current model of ecology and economy. In Our Ecological Footprint, Wackernagel and Rees point out that “society operates as if nature were an expendable part of our economy”(8). While it is not without hope, New York City currently exists as a trade based locale heavily dependent on the industries of its region and beyond. “Not all countries, regions [*or cities*] can be net importers of carrying capacity! This fact has profound implications for conventional development models” (Wackernagel 98, italics by author). Progressive ecological models often buck the global market's economics driven paradigm. In the Steady State, citizens rich in market capital will not be valued over the historically poor workers (producers). “In short, the world's money rich simultaneously make the largest claim on natural income (i.e., they have the largest Footprints) even as their actions (inadvertently?) reduce future productive potential for all” (Wackernagel 103).

For the high class of today's city, it's shape up or ship out. The Steady State will favor the model of a direct work to consumable resource relationship. This a place of soup lines for the suits - all citizens must earn their eats.

## THE METRIC

### Identification of New York City's Population Sheds

The breakdown of the population ecology into its input and output components, its 'sheds', is the first step in determining where the qualitative factors of the population footprint lie. If, with the twist of a tap the Croton Reservoir becomes a water ecology's input shed and the Hudson River an output shed with a toilet flush, then what are the corresponding population ecology sheds? Once identified the sheds can be measured on an individual basis then tweaked to the benefit of the footprint.

### SHED 1: New Recruits

#### The Immigrant Shed

New York City's most fruitful resource is its immigrant shed. The city's foreign-born population rose from 28 percent of the total population in 1990 to 36 percent in 2000 (The Newest New Yorkers

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## Comparison of National Footprints with NYC Foreign Born Populations:

<u>Footprint*</u>	<u>Benchmarks</u>
2.2	World Average
9.8	American Average
1.8	Worldwide Availability per person

### NYC Foreign Born Populations

	<i>Rank</i>	<i>Nation</i>	<i>Population</i>
1.8	#1	Dom. Republic	369,186
1.8	#2	China	261,551
2.4	#3	Jamaica	178,922
NA	#4	Guyana	130,647
2.3	#5	Mexico	122,550
2.0	#6	Ecuador	114,944
0.8	#7	Haiti	95,580
2.2	#8	Trin. Tobago	88,794
1.6	#9	Colombia	84,404
4.2	#10	Russia	81,408

\*(Global Hectares per person)

Census data: Newest New Yorkers p.8

Footprint data: [www.footprintnetwork.org](http://www.footprintnetwork.org)

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5). 43% of the New York City workforce are immigrants (Liu) and in manufacturing, an economy at the heart of our matter, immigrants formed 64% of the workforce (NYC Dept. of Planning). How can we

continue this productive population shed's influx and how can it be fine tuned?

With the comparative rankings shown above, a select roster begins to emerge. The Ecological Footprint as our measure, we can begin to see the significant crossover between the best behaved world populations and the city's immigrant groups. It would be a wise first step to continue to woo populations from nations such as Haiti and Colombia (countries with Footprints below the allowable global limit and high influx rates to our city) as Footprint ambassadors. Stepping stones laid by the Immigration Act of 1990<sup>1</sup> can guide immigration shifts from these beneficial places – an improved Footprint via immigration visas. These celebrated nationals could assume the professorial role of teaching the existing population their ways. A reverse assimilation of sorts, the existing population would be encouraged to develop language skills compatible with their immigrant teachers'; All in an effort to assume the sensitive lifestyles of the newest New Yorkers' foreign homelands.

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<sup>1</sup> "The Immigration Act of 1990 (IMMACT 90), effective November 29, 1991, recognizes the growing internationalization of the world's labor market. This act was necessary 'to help American businesses hire highly skilled, specially trained personnel to fill increasingly sophisticated jobs for which domestic personnel cannot be found' (Federal Register Vol. 56 No. 230, Friday, Nov. 29, 1991)." Quote taken from New York State Dept of Labor, "Workforce New York".

## **SHED 2: Mean Green Machine**

### The Worker Shed

With a changed ecological model comes a city full of new job descriptions. Those with expertise in the current market based economy will be devalued and pages of want-ads will call for workers rich in the demands of the new ecological model. Given the Steady State's ecological divisions of: Energy, Garbage, Food, Movement, Other Species, Air, Manufacturing, Water, Thermodynamics, and Building, a new occupational value system emerges.

An immigrant farmer from the Dominican Republic sweeping floors in today's New York would be empowered by the Steady State regime change. In addition to Dominican, Guyanese and Jamaican farmers, drawing from our current immigrant population would produce a wealth of Chinese fisher(wo)men, Mexican machinists, Ecuadorian builders, and Haitian textile workers (Britannica Almanac).

This is not to say that all service industries will be debased – white collar wage earners needn't pack their bags just yet . An economic/ ecologic paradigm shift of this scale will require all of the creative thinking our city can muster. Vertical farming, solar and hydro engineering, adaptive manufacturing, a construction industry based on locally available materials (repair rather than replace) will all need deep investigation aimed at rapid refinement towards greener practice.

It will be critical that all of New York's existing systems, resources and talents be smartly reused. Arts, media, film, and parkland will be a must for hard working Steady Stater's recreation. Assuming he will take payment in local farm produce, Derek Jeter may still have a position at short stop with the New York Yankees. And, if for no reason other than its maverick green example, tourists will continue to visit (how they will earn their keep is another question!) so there may still be hope for high hotel, restaurant, and museum traffic.

### **SHED 3: Day Laborers**

#### The Commuter Shed

"Every weekday, more than 1.3 million people commute to work in Manhattan - nearly doubling the borough's population" (NY Times Article 11/7/05). Fuel and travel resources are needlessly spent on a population that comes and goes each day. An NYC Steady State is a commuter free state, and the current commuters must relocate within the city's boundaries. In addition, no longer will the Steady State economy desire the corporate upper class so common amongst today's commuter body. So as not to seem exclusionary, the Steady State will remind its commuter shed that it is not too late to cash in on any one of their many habitation choices.

A plague upon your shiny suburban house, urban living never looked so good (Wackernagel 102)!

Legislation committed to the exportation of the city's day labor force will not be looked upon favorably by all. Those wanting 'back in' will be made aware of a limited number of day labor passes subject to quota demands. The wait process is a long one, but fair. Steady State officials should be warned that their coveted model of living will draw 'illegals' (commuters risking it all for a shot to exist in the greener grass of the metropolis). In accordance, New York City would be well advised to develop stronger border control measures: checkpoints at river crossings and a ring of fences (three layers thick) surrounding all jurisdictions. Concerned citizens might even consider vigilante watch groups. Keeping the banished commuter shed out of the Steady State should stop at nothing short of militaristic measures!



*Fences surrounding the NYC Steady State protect against covetous intruder border crossings.*

## **Start Your Engines**

### Policies to Push the People

At play in the current economy driven New York City, the Steady State is an ideological model. Dried up resources will eventually drive up commodity costs to the point that the Steady State *becomes* the marketable way. In the meantime, promotion of the Steady State

will come through public awareness campaigns and policy passing. A progressive revolution at the local scale - others will eventually follow – it will hardly be the first time that New Yorkers have occupied the forefront. Meager recycling efforts of the moment, will need to blossom into a city wide public awareness blitz aimed at completely green living. The population armed with Steady State motives, will elect candidates that share in their ambitions. At times tariffs and taxes will serve as motivator, but eventually the Steady State will take over as the newest trend in urban living. High Footprinted outsiders will gawk with envy, and once their natural resources have expired, New York City's already established Steady State will lead by example.

To apply the Ecological Footprint to the current state of city affairs is to quickly realize that something needs to be done. Rather than panic, the people of New York should rest assured that already lurking within the population's skill sets are the tools for Steady State living. We just have to look in the right places.

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