# THE POST-FORDIST POLITICS OF SUSTAINABILITY ON LONG ISLAND

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**ABSTRACT:** The literature on sustainable development has neglected suburban regions. Through a case study of suburban Long Island, I examine the theoretical and empirical interactions between sustainable development and post-Fordism. Are these theories complements or competing alternatives? As Long Island moves towards a high technology, information-based economy, how are its environmental politics changing? Are sustainable development policies compatible with this new post-Fordist economy? While there are some promising changes towards sustainability, regional policies continue to emphasize financial wealth at the expense of regional well-being and sustainability.

#### **INTRODUCTION**

The United Nation's Earth Summit in Rio De Janero placed sustainable development squarely on the world agenda (Keating, 1993; McCormick, 1989; Middleton et al., 1993). National governments, rural and international development agencies, and cities have been actively developing their own sustainability agendas. Suburbs, however, have been largely absent in this debate. Suburbs, with their sprawling land use patterns, have long been anathema to urban environmental planners. While much of the urban sustainability literature promotes compact cities (Haughton and Hunter, 1994), suburbs continue to expand. With more Americans now living in suburbs than cities (Palen, 1995), urban geographers must critically examine suburbanization - sustainability linkages.

Suburbanization raises many questions for advocates of sustainability. Middle class perceived suburbanites are as strong environmentalists, yet their suburban communities are seen as unsustainable. Housing is land extensive, requiring large investments in For example, suburbanites are infrastructure. heavily dependent upon automobile transportation, with all its associated environmental costs. In the suburbs, governments subsidize these inefficient land use patterns in a variety of ways (Engwicht, 1993; Zuckerman, 1991). Many of these problems can be traced back to policies established in prior decades to support the mass consumption, industrial economy of the post-World War II period. As the economy shifts towards information and high technology industries, can the suburbs become more sustainable? In this paper, I examine this question through a case study of Long Island, New York, one of America's largest and most affluent suburban regions.

After decade upon decade of economic and spatial growth, the 1989 recession dramatically marked the end of an era on Long Island. Led by a collapse in the region's leading defense industries, Long Island lost over 100,000 jobs (Bernstein, 1993). For the first time in recent memory, local real estate prices slumped 15%. Median home prices in Nassau County dropped from \$200,000 to \$175,000 from 1989 to 1993 (Dionisio, 1993). In response, regional leaders are pursuing a variety of different programs aimed at trimming taxes, strengthening the economy, and improving environmental quality. Governor George Pataki, a fiscally conservative Republican, has proposed a public takeover of LILCO, the nation's most expensive energy utility. A steady stream of environmental initiatives culminated in the passage of a state-wide \$1.7 billion environmental bond act. Business leaders favor policies that strengthen high technology industries on Long Island without compromising environmental quality. Taken together, these and

other policies represent a recognition by suburbia that it needs to restructure the policy linkages connecting environment and economy. On the Long Island's East End, in particular, sustainability has become a dominant theme of the local political agenda. (When Virag (1996) proclaimed the end of the suburban lawn in a recent Newsday article, I began thinking that the recession had indeed "ended suburbia as we know it.") While there are some important structural changes afoot, most environmental initiatives focus upon cleaning up For now, the suburban growth past abuses. machine remains intact. But as the cleanup costs mount, the ensuing fiscal pressures may indeed force Long Islanders finally to embrace a new policy framework that authentically implements the principles of sustainability.

# SUSTAINABILITY AND POST-FORDISM: OPPOSITES OR COMPLEMENTS

Since the political and economic crises of the mid-1970s, individual regions have undergone protracted periods of industrial restructuring, as Long Island is currently undergoing. Economic geographers have offered a variety of theoretical interpretations of these changes. One of the more comprehensive approaches is post-Fordism, but existing post-Fordist theories have not focused sufficiently on environmental reforms. In contrast, sustainable development theorists argue, from a more normative perspective, that environmental and social equity reforms must be central to current restructuring efforts.

The post-Fordist model emerged out of the work of French regulationists, most notably Aglietta (1979) and Lipietz (1987). They argue that the crises of the 1970s and 1980s signified a breakdown of the prevailing Fordist political economy, which was characterized by mass production technologies, a mass consumption culture, and Keynesian welfare policies. According to regulationists, each stage of capitalist development consists of a particular regime of accumulation and mode of regulation. The regime of accumulation is a "form of surplus value production and realization, supported by

particular types of production and management technology" (Esser and Hirsch, 1994, 73). Modes of regulation refer to the sociopolitical institutions and ideologies that regulate the economy and ensure its smooth reproduction. The post-Fordist regime of accumulation is driven by new information technologies organizational networks. and Transnational corporations (TNCs), now rely upon factories located around the world to produce parts that are later assembled in one locale. TNCs increasingly rely upon subcontractors, part-time labor, just-in-time inventory systems, and other information technologies to minimize costs (Dicken, 1992).

Cost minimization, however, often leads to cost externalization, as workers and ecosystems are exploited to bolster profits (Foster, 1994). Brecher and Costello (1994) and others argue that post-Fordism has initiated a "race to the bottom." In recent years, nations have replaced their Keynesian welfare policies with "neo-liberal" policies to attract industry and investment and to placate the demands of international capital markets and agencies like the International Monetary Fund (IMF). Under neo-liberalism, governments are slashing social services and labor, environmental, and consumer safety standards. This national deregulatory movement coincides with calls for greater subnational autonomy by provinces, like Quebec, and local states (Ohmae, 1995). While the IMF is busy managing international monetary flows, new supranational arrangements like the North American Free Trade Agreement (NAFTA) and the World Trade Organization (WTO) are at work liberalizing international trade flows. These policies are suggestive of a new global mode of regulation designed to facilitate the post-Fordist regime of accumulation.

Sustainable development, however, has emerged as a major alternative framework to these neo-liberal policies. Many of those involved with sustainability push for what Brecher and Costello call bottom-up, as opposed to top-down, globalization (Brecher and Costello, 1994). Communities want to be economically self-reliant. They want trade, but on terms that level upwards (not downwards) social and environmental standards. They want democracy that recognizes citizens as equals in the voting booth, in the halls of government, and on the shop-floor. And they want land policies that validate each region's ecology and communities.

The first widely-accepted definition of sustainabilitv came from the Brundtland Commission, which defined sustainability as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs (WCED, 1987, 43)." Sustainability entered popular lexicon at the United Nation's Earth Summit in Rio de Janeiro in 1992 (sponsored by the United Nation's Commission on Environment and Development). Since that conference, most definitions of sustainability have emphasized the need to balance social equity, ecological integrity, and economic prosperity. This tripartite framework, for example, was adopted by President Clinton's Commission on Sustainable Development (PCSD, 1996)].

Sustainable development has moved environmental policy discussions away from the Club of Rome's (1972) emphasis upon overconsumption and instead emphasizes ecological degradation and biodiversity (IUCN, 1980). The sustainability model also addresses the market's endemic tendency to externalize ecological costs (Jacobs, 1991) and calls for greater communal constraints upon market excesses (Daly and Cobb, 1989).

Returning to the French regulationists, if post-Fordism represents a new regime of accumulation, can sustainability develop into a coherent mode of regulation? According to Gibbs (1996):

"It can be suggested that the current patchwork of international environmental agreements, growing public awareness of environmental issues, the rise of "green consumerism", corporate environmentalism and the incorporation of sustainable development into local and national economic policy represent constituent elements of a new mode of social regulation....Sustainable development measures, [however,] are incompatible with the type of neo-liberal, free-market policies that have gained ground in many developed countries in recent years. Coordination, cooperation, equity and democratic involvement are essential features of policies for sustainable development" (pp. 7-8).

Yet, it is not necessary to counterpose sustainability and neo-liberalism as Gibbs has done. In reality the two already co-exist with one another. And some advocates of sustainability welcome this melding of a new ecological sensibility with a high technology, information-based economy (Gore, 1992). In this sense, the debate over sustainability is at a crossroads. The next decade will be a critical period for defining whether sustainability is an alternative to neo-liberalism or merely a set of ancillary policies.

Sustainable development's status as an alternative to neo-liberalism is already questionable. At the global scale, sustainable development initiatives address issues like global warming and biodiversity but leave global free trade practices As a result, localities lose a uncontested. considerable amount of control over their own economies; they become globally-dependent rather than locally self-reliant. Ironically, policies that are seen as sustainable, such as directing local labor towards jobs in the nonprofit sector, also help to support neo-liberalism. As technologies and globalization create excess labor pools, that labor can now be deployed as social capital in the nonprofit sector (Rifkin, 1995; Drucker, 1993). While these workers will face lower incomes, they can take comfort in the fact that they now live lightly on the earth (Luke, 1983).

The suburbs provide some unique features when considering the juxtaposition of sustainability and post-Fordism. The suburbs have become an important job center in the post-Fordist landscape. High-tech industrial regions from Silicon Valley to the Route 128 corridor in Massachusetts are built primarily in suburban zones; the post-industrial workforce is primarily a suburban workforce. At home, suburbanites have been at the forefront of the environmental movement; but this environmentalism has often been exclusionary rather than inclusionary (Carlin, 1995; Frieden, 1979). While the suburbs are strong supporters of the economic and ecological themes of sustainability, they have yet to fully embrace the equity considerations that are also vital to sustainability.

Early on, Redclift (1987) cautioned that sustainable development was a deeply compromised social construct. As much as scholars and activists wished to think otherwise. western style development could never be sustainable because it premised upon capital accumulation. is Sustainability is further muddled by a ubiquity of definitions. Holmberg and Sandbrook (1992, 20) have identified some 70 definitions of sustainability!

Despite (or perhaps because of) the term's theoretical incoherence, sustainability has emerged as an important international movement. Given this international and theoretical context, how is sustainability being defined on suburban Long Island?

# LONG ISLAND: FROM CRISIS TO POST-FORDISM

During the post-World War II era, Long Island matured into one of the nation's premier suburban regions. William Levitt pioneered his mass produced housing on Long Island in Island Trees, renamed Levittown in 1948 (Jackson, 1985). This innovation, coupled with federally subsidized home mortgages, allowed housing developments to mushroom across Nassau County, replacing established potato fields. As city residents relocated to the suburbs, Nassau County's population tripled from 400,000 (1940) to 1.4 million (1970). The local employment base was dominated by local service industries for New York City commuters and their families and Long Island's aerospace industries.

Long Island secured its suburban preeminence through a combination of size and wealth. With 2.6 million inhabitants in 1990, it is the largest suburban SMSA in the country. In terms of wealth, Long Island ranked first in the nation in median disposable income (\$62,000), household retail sales (\$33,000), and the percentage of households with incomes over \$50,000 (62.7%) in 1995 (Townsend, 1996). In a recent survey, four of the top ten wealthiest towns in the United States were on Long Island; many other Long Island communities were in the list's top fifty (Rather, 1996).

Property wealth is carefully guarded through Long Island's maze of exclusionary zoning regulations. The politics of post-war suburban exclusion has centered on issues of race and class (Danielson, 1976; Plotkin, 1987). Large-lot zoning, limitations on multi-family dwellings, and building height restrictions are just a few of the building code regulations used by local communities to limit unwanted development and "undesirable" neighbors. For example, since low income families cannot afford single family homes they are locked out of communities that lack adequate supplies of multifamily units. Long Island's home ownership rate, 80%, is the highest in the country (Gale Research, 1994, 251).

Local town and village governments are responsible for these land use decisions. New York's home rule tradition has allowed politicians to carve up Long Island into 1,037 different taxing authorities, including 2 counties, 13 towns, 2 cities, 93 villages, 127 school districts, and 801 special districts. This political fragmentation, coupled with one of the nation's most egregious patronage systems, gives the region one of the highest local tax rates in the country (Schemo, 1994). These high taxes inhibit economic growth but have the statusenhancing benefit of raising the barriers to entry for poorer city residents.

The 1989 recession dealt a severe blow to the Island's economic health. Employment and profit declines on Wall Street, combined with severe regional defense employment cutbacks, led to a loss of over 100,000 jobs. Long Island, which had been one of the ten most defense dependent regions in the country up until the late 1980s, saw its aerospace industry evaporate (Oden, 1994). Following its 1992 takeover of Grumman Corporation, Northrup terminated thousands of jobs; Long Island had lost its last remaining major aerospace firm (Kmonicek, 1995). Regionally, half of the 60,000 manufacturing jobs lost since 1988 were defense related (Bernstein, 1995). The effects of these cutbacks were severe. Home foreclosure rates shot up 500% between 1988 (962) to 1993 Housing prices in many regions saw (6.375). significant declines, for the first time in decades. Welfare cases increased 45% from 1989-1992 (Schemo, 1994); unemployment rates doubled from 3% to 6% (Bernstein, 1995).

The major regional response to this turmoil came from the Long Island Association (LIA), the Island's largest business association. The LIA sponsored an Economic Summit in 1991, which aimed to strengthen regional planning and ease the permitting maze put in the path of developers. In 1994, the LIA held a second, more ambitious Economic Summit. The Summit process facilitated over a dozen subcommittees covering a wide spectrum of issues, and the LIA reached out to communities throughout the Island through a series of town meetings.

In 1995 the LIA launched Project Long Island, a campaign to generate 28,000 jobs in five years in five targeted industries. The LIA wanted to replace the Island's lost aerospace industrial base with a post-Fordist economic base, emphasizing high-tech companies. The five targeted industries all had a strong presence on Long Island, but their industrial growth had never been facilitated by public and quasi-public development programs. The five industry groups are biotechnology and engineering; medical imaging, health care and information systems; computer software; graphics communication; and electronics (Gordon, 1995). The plan was modeled after a California high-tech initiative and relied upon many of the same California consultants. The ultimate goal is to make Long Island a national high-tech leader (Oden, 1994). To achieve this, the LIA argues that the region must overcome many obstacles. The Island must reduce its high tax and utility rates. Fiscal incentives are needed to lure businesses to the Social service costs must be cut by Island. privatizing services and/or cutting service levels. For example, there are plans to consolidate school districts and privatize governmental services, like hospitals. These policies parallel national conservative policies and the neo-liberal globalization paradigm, outlined above.

# LONG ISLAND'S POLITICS OF SUSTAINABILITY

While the general thrust of the LIA's policies is to increase the region's economic vitality, the LIA has been careful to portray the region's natural resources as a critical economic asset. For example, the LIA recommends guiding:

In a three page vision statement, the LIA articulated its goals for harmonizing economic and

environmental concerns. In their vision statement, crafted by business leaders and environmentalists, the LIA foresees Long Island as a leader in reusing abandoned industrial sites, increasing preserved land to an area equal to that at the turn of the century, and retaining Suffolk County's agricultural leadership in the state. The LIA notes that the Island has:

"become a magnet for high tech, knowledge-based companies that depend upon a healthy and attractive environment to recruit and retain their highly educated personnel" (LIA, 1994, 29).

While attention is paid to rebuilding downtowns and mass transit, the statement overwhelmingly focuses upon the symbiotic relationship between natural resource preservation, tourism and housing, and the potential for environmental technologies to serve as a regional economic engine. The landscape itself becomes a magnet for high-tech industry.

Linking economic growth and environmental preservation is already well beyond the planning stages. In recent years the public has consistently supported many expensive environmental programs. Two Long Island water bodies, the Long Island Sound and the Peconic Estuary, are part of EPA's National Estuary Program, the result of strong local lobbying. The region's third estuary, the South Shore estuary, is now being managed through a state program. Suffolk County has one of the nation's most ambitious agricultural land preservation programs and remains the state's most important agricultural county (Kelly, 1994). In 1995 Governor Pataki designated the eastern Suffolk County's Pine Barrens a new state preserve, the third largest in New York State (after the Adirondacks and Catskills). State and federal agencies also continue to spend large sums of money on beach replenishment programs; they will spend \$30 million to replenish Westhampton beaches that front some of the region's most expensive real estate. The program is part of a 30 year \$200 million court settlement (Rather, 1996b, LI8). Governor Pataki has also promised Long Island hundreds of millions of dollars from his \$1.7 billion Clean Water/Clean Air Bond Act of 1996, approved in a state-wide referendum in November, 1996 (Newsday, 1996).

<sup>&</sup>quot;development away from pristine and environmentally sensitive areas toward areas more suitable for development through enhanced use of a variety of techniques including transfer of development rights (TDR's), purchase of development rights (PDR's) and construction of state-of-the-art sewage treatment plants" (LIA, 1994, 29).

While regional elites have given natural resources a high regional priority, this has not altered the Island's structural reliance upon sprawl, automobiles, and high consumption lifestyles. Politicians and planners have also ignored the social inequities that plague Long Island. To fill this gulf, some citizen groups have begun organizing a broad coalition of interest groups around the theme of sustainability. In 1996 The Long Island Progressive Coalition (LIPC) released a 150 page document on sustainability (LIPC, 1996), the Long Island Neighborhood Network, in cooperation with the national Sustainable Development Institute (SDI), published a pamphlet on sustainability (SDI, 1996), and Roger Stone (1996), SDI's founder, published Fair Tide, a new book which examines sustainability issues on Long Island.

LIPC, in particular, argues that sustainability must entail a radical departure from the politics of globalization. They argue that Long Island must replace:

"an unthinking support of <u>quantitative growth</u> with a careful promotion of <u>qualitative development</u>....Our vision for the year 2020 is a Long Island of vibrant communities filled with civic activity, community health centers, cooperatively owned businesses, and responsive merchants. We cannot define the prosperity of a community by the living standards of the wealthiest, but by that of the vast majority. Cultures which sustain a relatively narrow difference between the living standards for the poorest and the richest tend to be more productive and more content than those where there is an everwidening gap" (LIPC, 1996, 7,9).

Sustainability has resonated most strongly on the East End of Long Island. Here, land development politics has reached such a crisis that the five east end towns are trying to secede from Suffolk County and form Peconic County. Local residents are concerned that Suffolk County has not been aggressive enough in preserving farm land and open space and that without stronger preservation efforts, the East End's tourist economy will be destroyed. The East End has a rich fishing history, and its agricultural industry is expanding into organic agriculture and viticulture. The East End also has tremendous wealth. Towns like Southampton and East Hampton are among the premier resort communities of the Atlantic seaboard.

And there's the rub. Even as citizen groups try to assert sustainability as a populist platform,

support for sustainable development is garnered primarily from those who are most affluent. Long Island's suburban affluence is an important reason why it is a national leader on many environmental issues and why regional elites have embraced environmental protection. Citizen groups forced LILCO to abandon its Shoreham nuclear reactor in 1989, the "first completed nuclear power plant in U.S. history to be stopped from opening" (Grossman, 1995). In the 1990s the Long Island Pine Barrens Society spearheaded the movement to preserve the Pine Barrens. In recent years. feminists, health, and environmental activists on Long Island have brought national attention to the Island's breast cancer problems. While these movements have addressed critical issues, they have not created effective alternatives to industrialism and, the lifeblood of the Island's cultural life, consumerism. Nor have they dealt with the social inequities of suburban life. Instead, these social movements perpetuate suburbia's affection for the politics of exclusion. Development is kept out of the Pine Barrens and nuclear energy off of Long Island, but not much else has changed. Without a more radical agenda, sustainability becomes sanitized. The water is clean, the streets smoothly paved. High paying jobs are plentiful, and the shopping malls are adequately policed. But the ideas at the heart of an authentic politics of sustainability - economic democracy, ecological health (as opposed to environmental aesthetics), and social equity - are lost.

### CONCLUSIONS

The premise of Long Island's post-war politics was that developers could turn potato fields into single family developments, and communities were then free to keep out unwanted activities and neighbors. Today, the region pays a high price for its exclusionary policies. Low income residents pay exorbitant rents, and business investment is stifled due to tax and utility costs. Rather than fighting suburbia's exclusionary policies, the LIA and other business interests intend to reduce taxes by cutting social services. According to the LIA, Long Island's future lies in finding ways to strengthen the Island's exclusionary land politics, protect its affluence and natural resources, and provide a high-wage economic base to support its residents and high costs of living. Since environmental amenities enhance the region's appeal, "sustainable development" is seen as a way of attractively packaging these policies.

These policies are inherently resource exploiting, unequitable, and nonsustainable. For example, suburban sprawl consumes land in environmentally questionable ways. It also forces public infrastructure costs to increase exponentially, tax rates to balloon ever higher, and auto speeds to slow down to a crawl. Clearly, elite landscape architecture aesthetics and pollution cleanups are not a substitute for sustainability. Fortunately, there are advocates for sustainability on Long Island who are emphasizing the necessity for economic democracy, social equity, and ecological integrity. Unfortunately, environmental politics continues to be driven by the sensibilities of the most affluent communities. For example, the East End's environmental politics is defined by the exclusionary needs of the wealthy, not the needs of the poor. The East End's preservationist goals are laudable, but woefully incomplete for a program premised on sustainability. For the moment, the East End is only proving the developers' case - that sustainability can be effectively packaged as a rationale for exclusionary land policies for the hyper rich.

An authentic, unsanitized politics of sustainability has a long road to travel on Long Island. Advocates will need to think more critically and act more strategically if they are serious about sustainability. The Long Island case illustrates that the achievement of sustainability's ends can be easily undermined by its means. Planners and citizen groups are placing too much emphasis upon technocratic and economic planning tools and insufficient emphasis upon democratic processes. Because the geography of suburbia is itself predicated on exclusion (Davis, 1992; Sibley, 1995), giving voice to the voiceless is all the more problematic. The information technologies that are integral to post-Fordism can also offer new opportunities for democratic empowerment and for giving voice to the marginalized. Citizens must learn how to appropriate these new technologies

towards the task of community building. To be sustainable, suburban communities must redefine their exclusionary practices. Community building must extend beyond the local; suburbs must reconnect with center cities and local regions to distant realms. Otherwise the globalization dynamics of post-Fordism will continue to spiral into a deadly race to the bottom for the many, while the rich few coopt sustainability through expensive environmental management programs for themselves.

### ACKNOWLEDGEMENTS

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### REFERENCES

- Aglietta, M. 1979. A Theory of Capitalist Regulation: The U.S. Experience. New York: Verso.
- Bernstein, J. 1993. Wanted: Jobs, Newsday (October 17):N10.
- Bernstein, J. 1995. The Difference is in Dollars: Gap Prompts push to Manufacturing, Newsday (Dec. 8):A71.
- Brecher, J. and Costello, T. 1994. Global Village or Global Pillage: Economic Restructuring from the Bottom Up. Boston: South End Press.
- Carlin, S. 1995. The Rediscovery of Boston Harbor: The Political Geography of Urban Environmental Agendas. Worcester, MA: Clark University (unpublished dissertation).
- The Club of Rome, 1972. Limits to Growth. New York: Universe Books.
- Daly, H. and Cobb, J. 1989. For the Common Good: Redirecting the Economy Toward Community, the Environment, and a Sustainable Future. Boston: Beacon Press.
- Danielson, M.N. 1976. The Politics of Exclusion. New York: Columbia University Press.

- Davis, M. 1992. City of Quartz: Excavating the Future in Los Angeles. New York: Vintage Books.
- Dicken, P. 1992. Global Shift: The Internationalization of Economic Activity. New York: Guilford Press.
- Dionisio, P. 1993. Snapshots: Various Indicators of Nassau County's Quality of Life, Newsday (Oct. 17):N15.
- Drucker, P. 1993. Post-Capitalist Society. New York: Harper Business.
- Engwicht, D. 1993. Towards an Eco-city: Reclaiming Our Cities and Towns, Better Living with Less Traffic. Philadelphia: New Society Publishing.
- Esser, J. and Hirsch, J. 1994. The Crisis of Fordism and the Dimensions of a "Post-Fordist" Regional and Urban Structure, In *Post-Fordism: A Reader*, ed. A. Amin, pp. 71-98. Oxford: Blackwell Publishers.
- Foster, J.B. 1994. The Vulnerable Planet: A Short History of the Environment. NY: Monthly Review Press.
- Frieden, B.J. 1979. Environmental Protection Hustle. Cambridge, MA: MIT Press.
- Gale Research. 1994. Gale City and Metro Rankings Reporter. New York: Gale Research.
- Gibbs, D. 1996. Theorising Sustainable Development: The Role of Regulation Theory,: Paper Presented at the Annual Conference of the Association of American Geographers, Charlotte, NC, April 9-13, 1996.
- Gordon, C. 1995. Tall Order: LIA Targets 5 Industries to create 28,000 new jobs on LI, Newsday (Dec. 8):A5.
- Gore, A. 1992. Earth in the Balance: Ecology and the Human Spirit. Boston: Houghton Mifflin.
- Grossman, K. 1995. Suffolk Closeup: An Era Remembered, Hampton Bays Chronicle. (June 28).
- Haughton, G. and Hunter, C. 1994. Sustainable Cities. London: Regional Studies Association.

- Holmberg, J. and Sandbrook, R. 1992. Sustainable Development: What is to be Done? In Making Development Sustainable: Redefining Institutions, Policy, and Economics, ed. J. Holmberg, pp. 19-38. Washington, D.C.: Island Press.
- International Union for the Conservation of Nature and Natural Resources (IUCN). 1980. World Conservation Strategy. Gland, Switzerland: IUCN.
- Jackson, K. 1985. Crabgrass Frontier: The Suburbanization of the United States. NY: Oxford University Press.
- Jacobs, M. 1991. The Green Economy: Environment, Sustainable Development and the Politics of the Future. London: Pluto.
- Keating, M. 1993. The Earth Summit's Agenda for Change: A Plain Language Version of Agenda 21 and the Other Rio Agreements. Geneva, Switzerland: Center for Our Common Future.
- Kelly, N.N. 1994. Blueprint for Our Future: Creating Jobs, Preserving the Environment. New York: Newmarket Press (Prepared by The East End Economic and Environmental Task Force of Long Island, New York).
- Kmonicek, K. 1995. Manufacturing on the Island, Newsday (December 8):A70.
- Lipietz, A. 1987. Mirages and Miracles: The Crisis of Global Fordism. London: Verso.
- Long Island Association (LIA). 1994. Long Island Summit, 1994. Commack, LI: Long Island Association.
- Long Island Progressive Institute (LIPC). 1996. Long Island 2020: A Greenprint for a Sustainable Long Island. Massapequa, NY: Long Island Progressive Institute.
- Luke, T. 1983. Informationalism and Ecology, *Telos* 56(Summer):59-73.
- McCormick, J. 1989. The Global Environmental Movement: Reclaiming Paradise. London: Belhaven Press.
- Middleton, N., O'Keefe, P., and Moyo, S. 1993. The Tears of the Crocodile: From Rio to Reality in the Developing World. London: Pluto Press.

- Newsday (editorial). 1996. Clean Air, Water--Even Earth, Newsday (September 15):A33.
- Oden, M. 1994. LI has Strengths to Rebuild its Economy: The Newsday Interview with Michael Oden, Newsday (December 23):A41.
- Ohmae, K. 1995. The End of the Nation State: The Rise of Regional Economies. London: HarperCollins.
- Palen, J.J. 1995. The Suburbs. New York: McGraw-Hill, Inc.
- Plotkin, S. 1987. Keep Out: The Struggle for Land-use Control. Berkeley, CA: University of California Press.
- President's Council on Sustainable Development (PCSD). 1996. Sustainable America: A New Consensus for Prosperity, Opportunity, and a Healthy Environment for the Future. Washington, D.C.: U.S. Government Printing Office.
- Rather, J. 1996. Region's Economic Mood Turns a Corner, New York Times (October 6):LI.
- \_\_\_\_\_. 1996b. Coastal Geologist Questions Plan for Restoration of Barrier Beach, New York Times (March 24):L18.
- Redclift, M. 1987. Sustainable Development: Exploring the Contradictions. London: Methuen. 132-204.

- Rifkin, J. 1995. The End of Work: The Decline of the Global Labor Force and the Dawn of the Post-Market Era. New York: G.P. Putnam and Sons.
- Schemo, D.J. 1994. Facing Big-City Problems, L.I. Suburbs try to Adapt, New York Times (March 16):A1.
- Sustainable Development Institute (SDI). 1996. Environmental Quality as Economic Advantage: A New Vision for Long Island. Washington, D.C.: Sustainable Development Institute.
- Sibley, D. 1995. Geographies of Exclusion. New York: Routledge.
- Stone, R.D. 1996. Fair Tide: Sailing Toward Long Island's Future. Great Falls, VA: Waterline Books.
- Townsend, P., ed. 1996. 1996 Long Island Almanac Ronkonkoma, NY: Long Island Business News.
- Virag, I. 1996. What's Happening to Lawn Island, Newsday (September 15):E20.
- World Commission on Environment and Development (WCED). 1987. Our Common Future. Oxford: Oxford University Press.
- Zuckerman, W. 1991. End of the Road: From World Car Crisis to Sustainable Transportation. Vermont: Chelsea Green.