

Solid Waste Management Issues Environmental Review Commission

January 24, 2006

Paul Crissman
Solid Waste Section

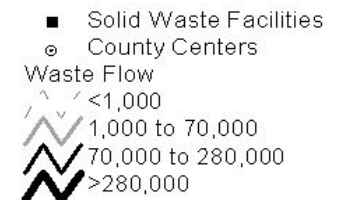
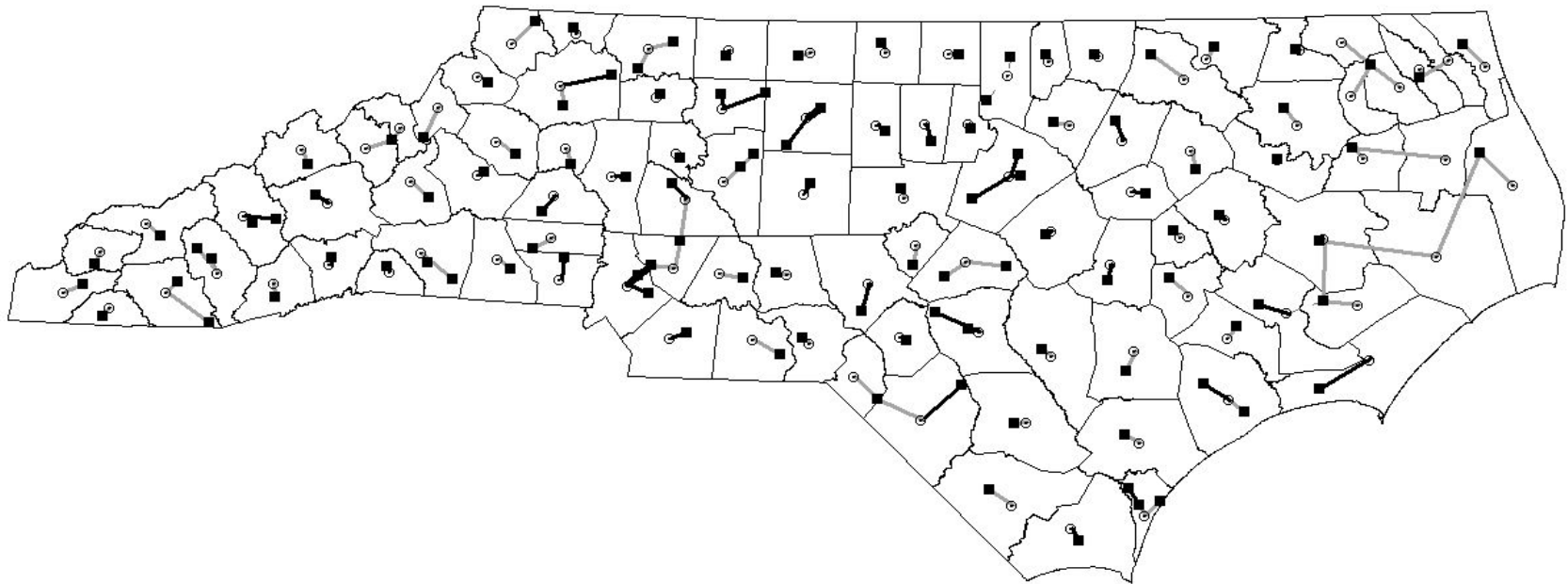


Note these two trees

Clay County, 1988



Municipal Solid Waste Flow FY 1990-1991



Solid Waste Management Act of 1989

Established:

Reporting requirements

Planning requirements

Landfill bans

New programs

Set goals and policies

garbage barge from New York City

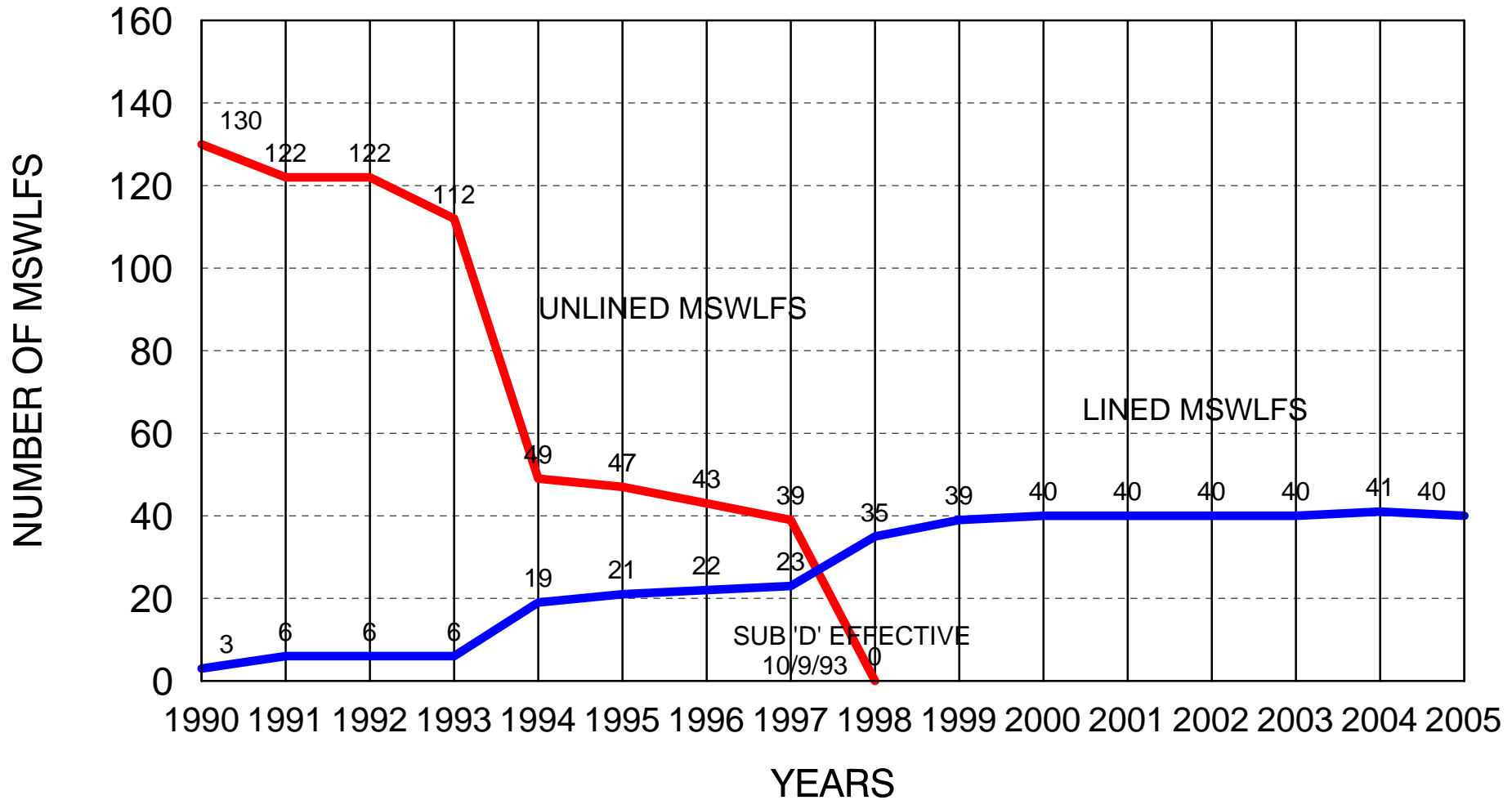


State lined landfill requirements (the 98 rule)

Federal Sub-title D Landfill requirements (RCRA)



STATUS OF MSWLFS IN NORTH CAROLINA





Consequences of Increased Landfill Requirements:

- Private sector landfills
- Waste imports/exports
- New and different facilities
- Tipping fees





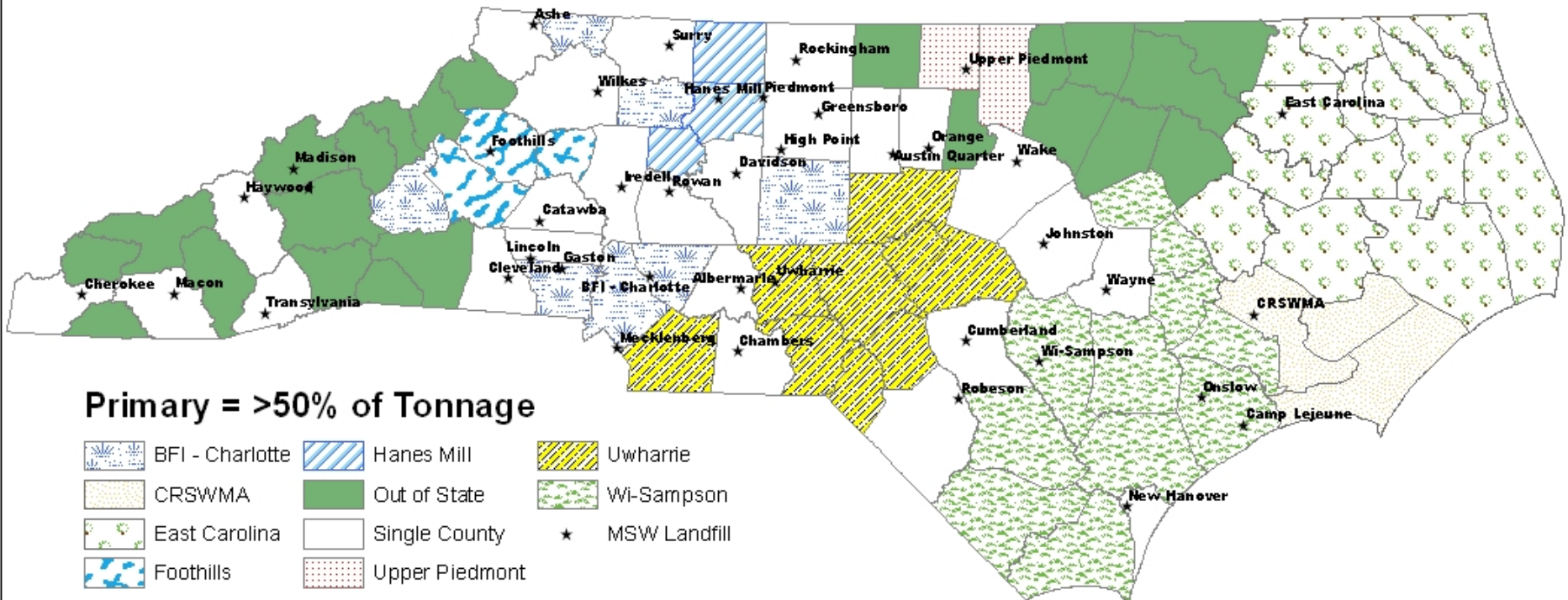




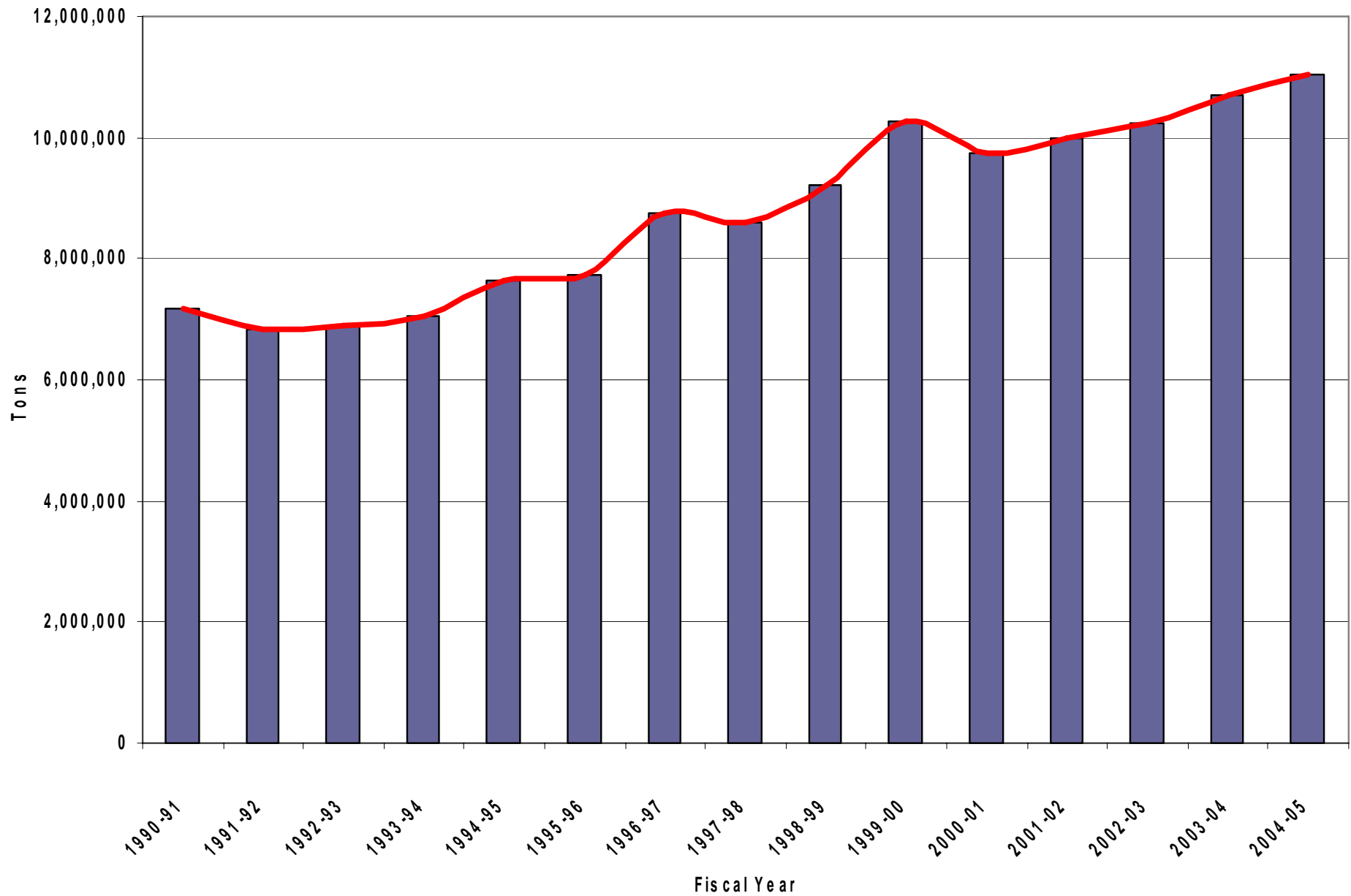
Municipal Solid Waste Flow Fiscal Year 2000-2001



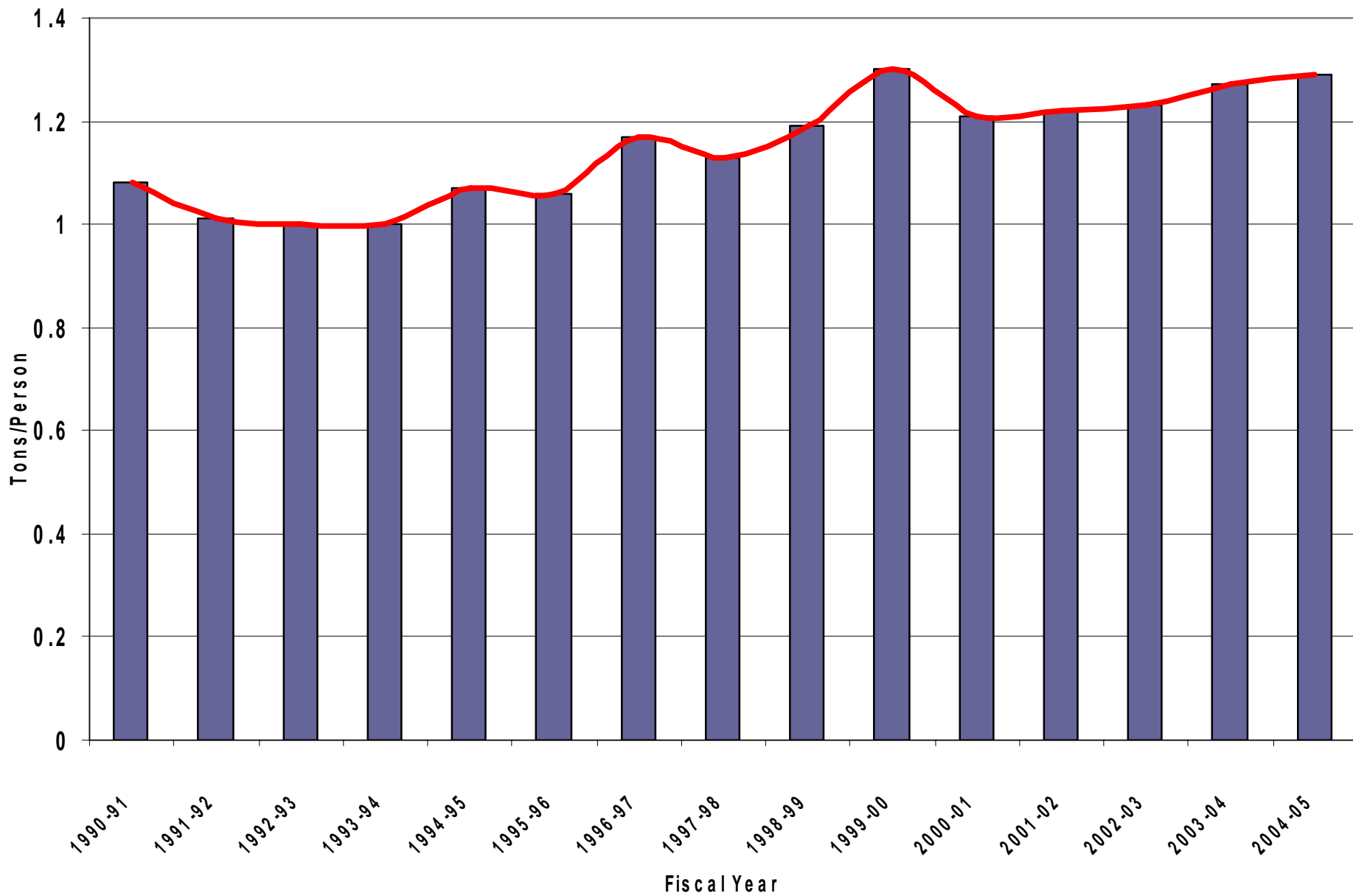
Primary MSW Landfill Used by NC Counties



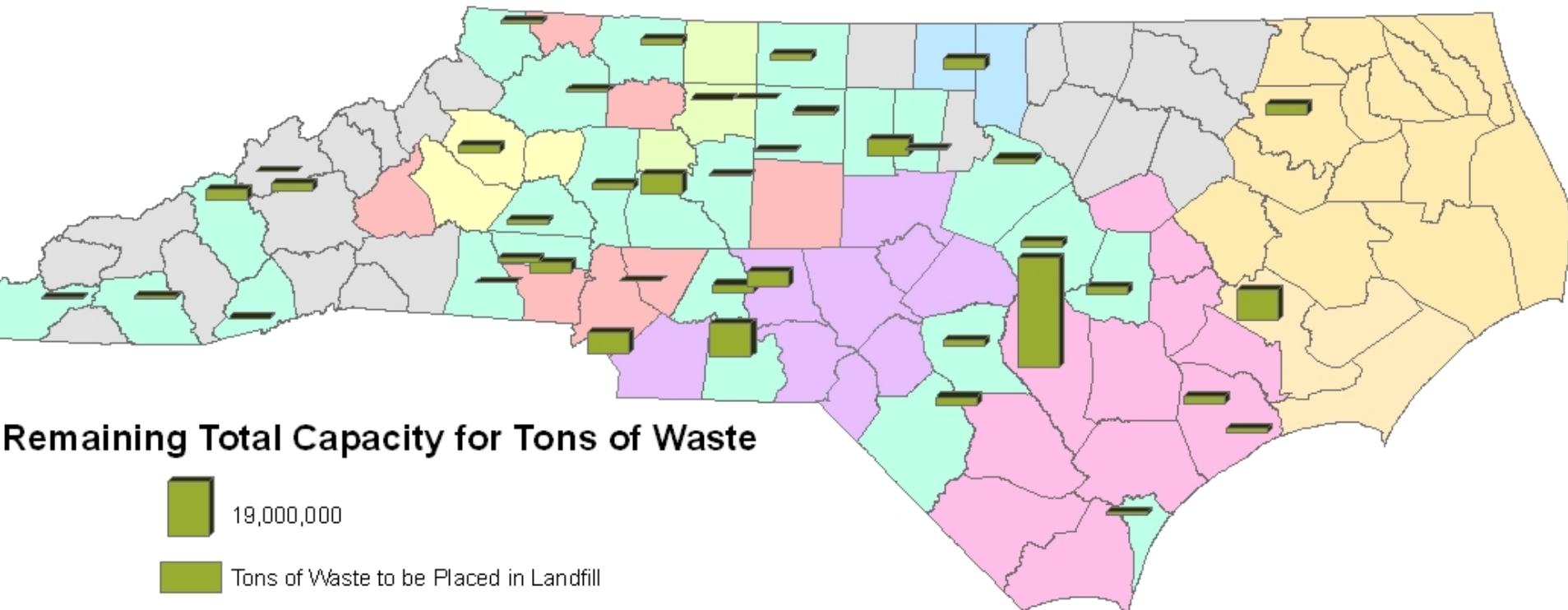
Tons of Solid Waste Disposed of by North Carolina



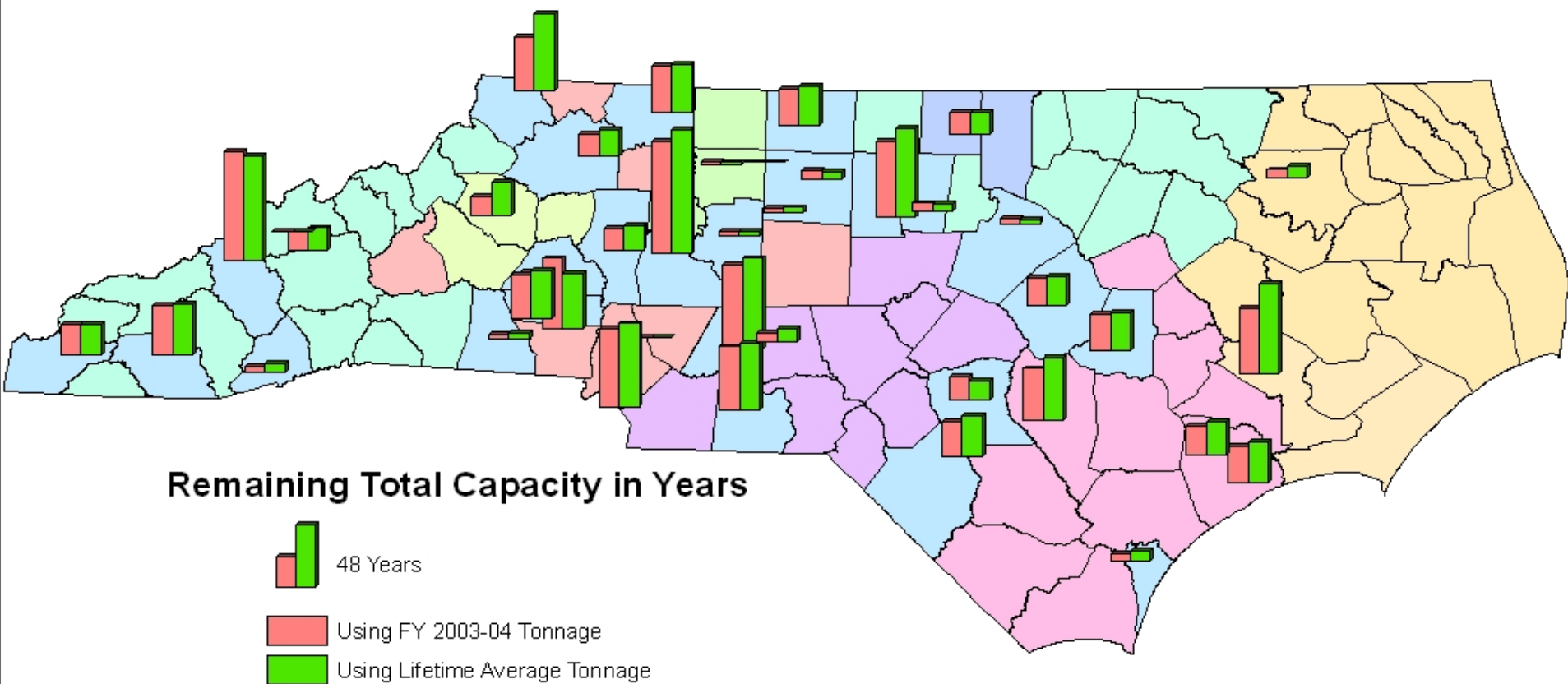
Solid Waste Disposed of by North Carolina on Per Capita Basis



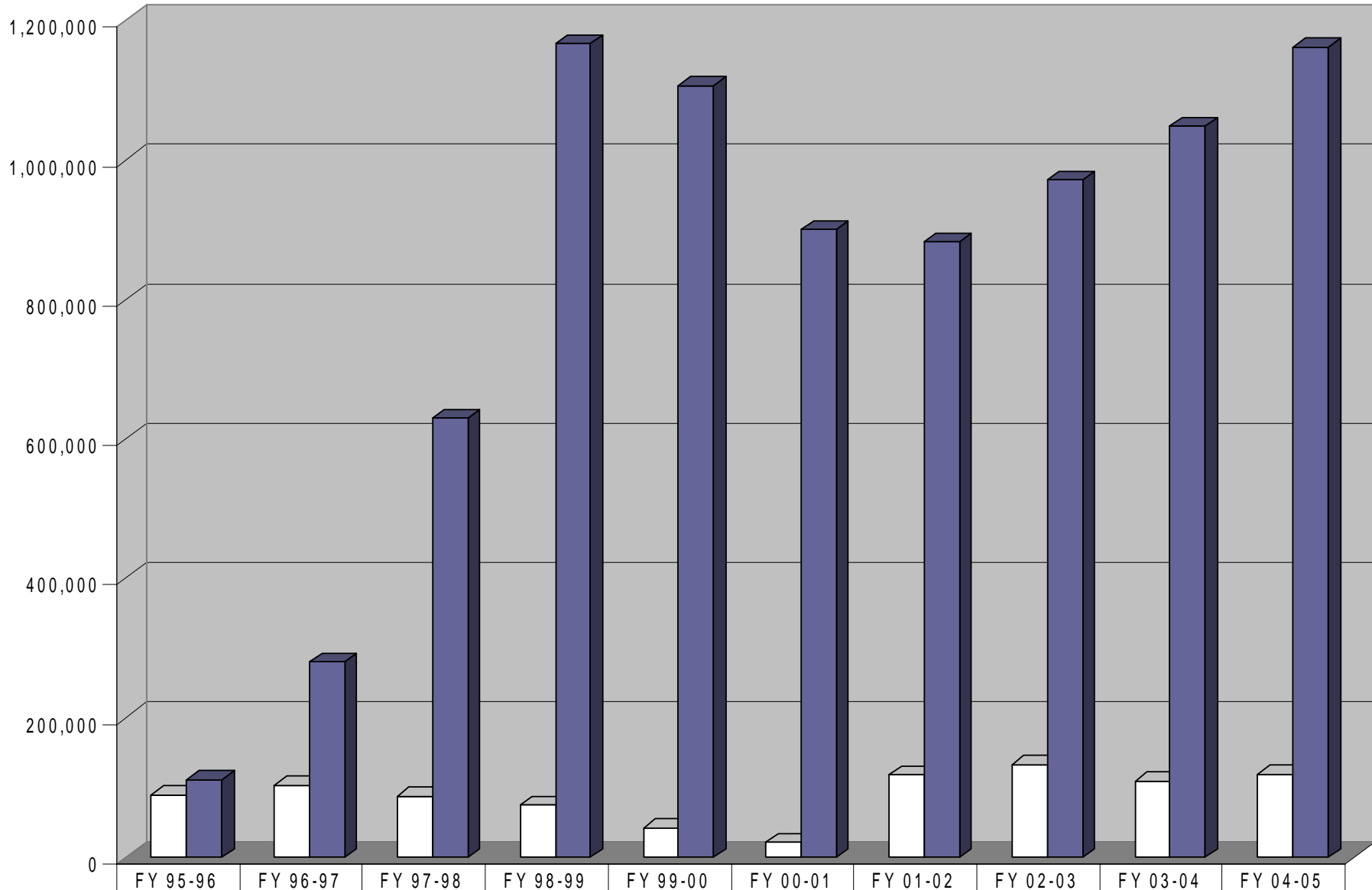
North Carolina Landfill Capacity



North Carolina Landfill Capacity



Net Imports/Exports of Solid Waste in North Carolina



Imports (tons)	88,982	103,510	87,393	74,185	41,840	21,614	117,981	133,145	108,803	119,202
Exports (tons)	111,097	280,400	629,415	1,166,875	1,106,897	900,743	882,247	971,286	1,048,111	1,161,926

Total Landfill Capacity for North Carolina

County: All Counties

Date	Opened Varied	Surveyed 9/21/2005	Months Open 9.2
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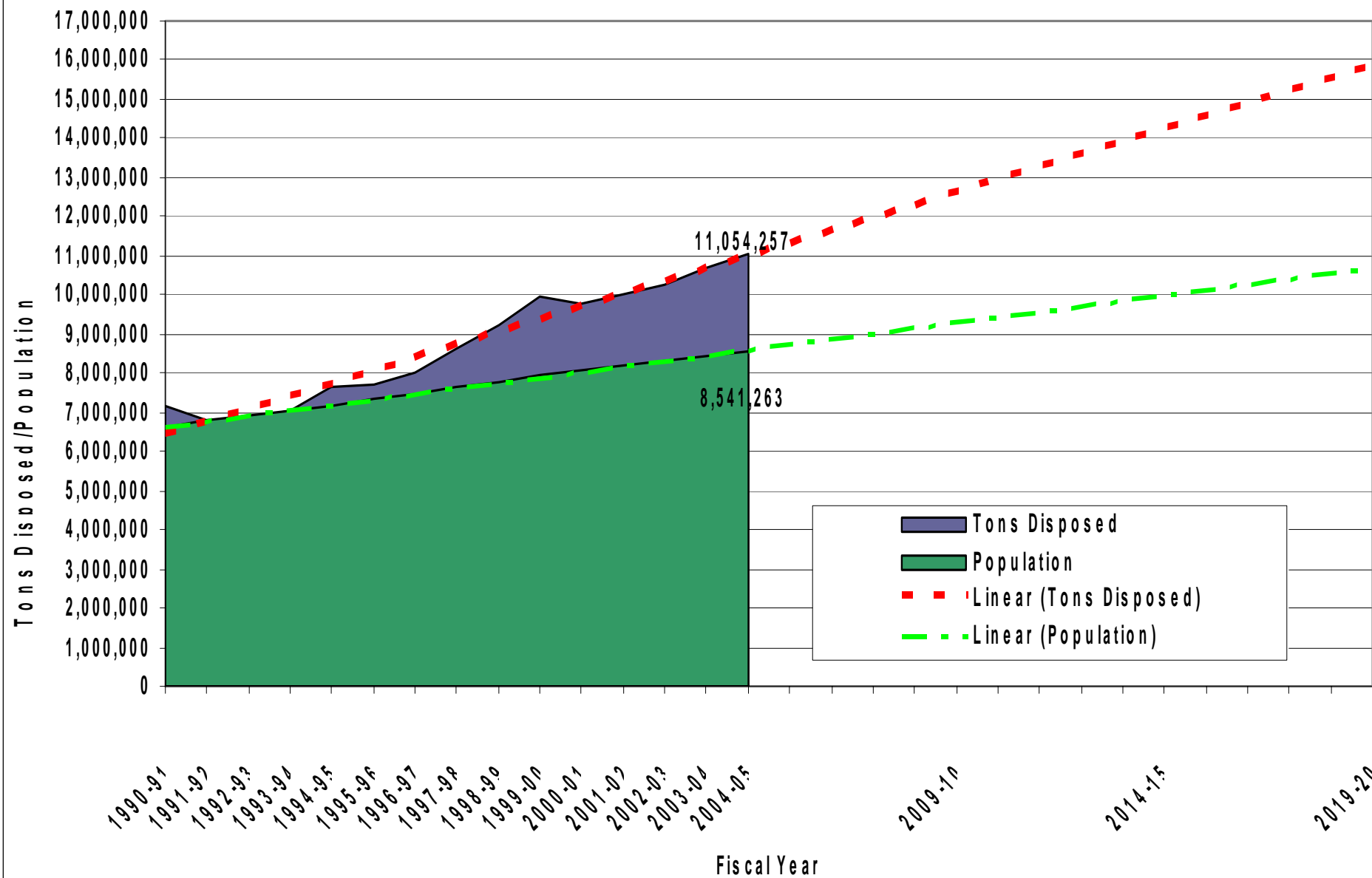
	Total	Avg. Per Year	2004-2005
Total Tons Disposed	59,549,524.6	6,479,185.5	7,673,315.7

	Used	Permitted	Total
Volume Airspace (yd ³)	99,333,552.9	137,315,486.0	339,013,657.0
Remaining Airspace (yd ³)		37,981,933.1	239,680,104.1

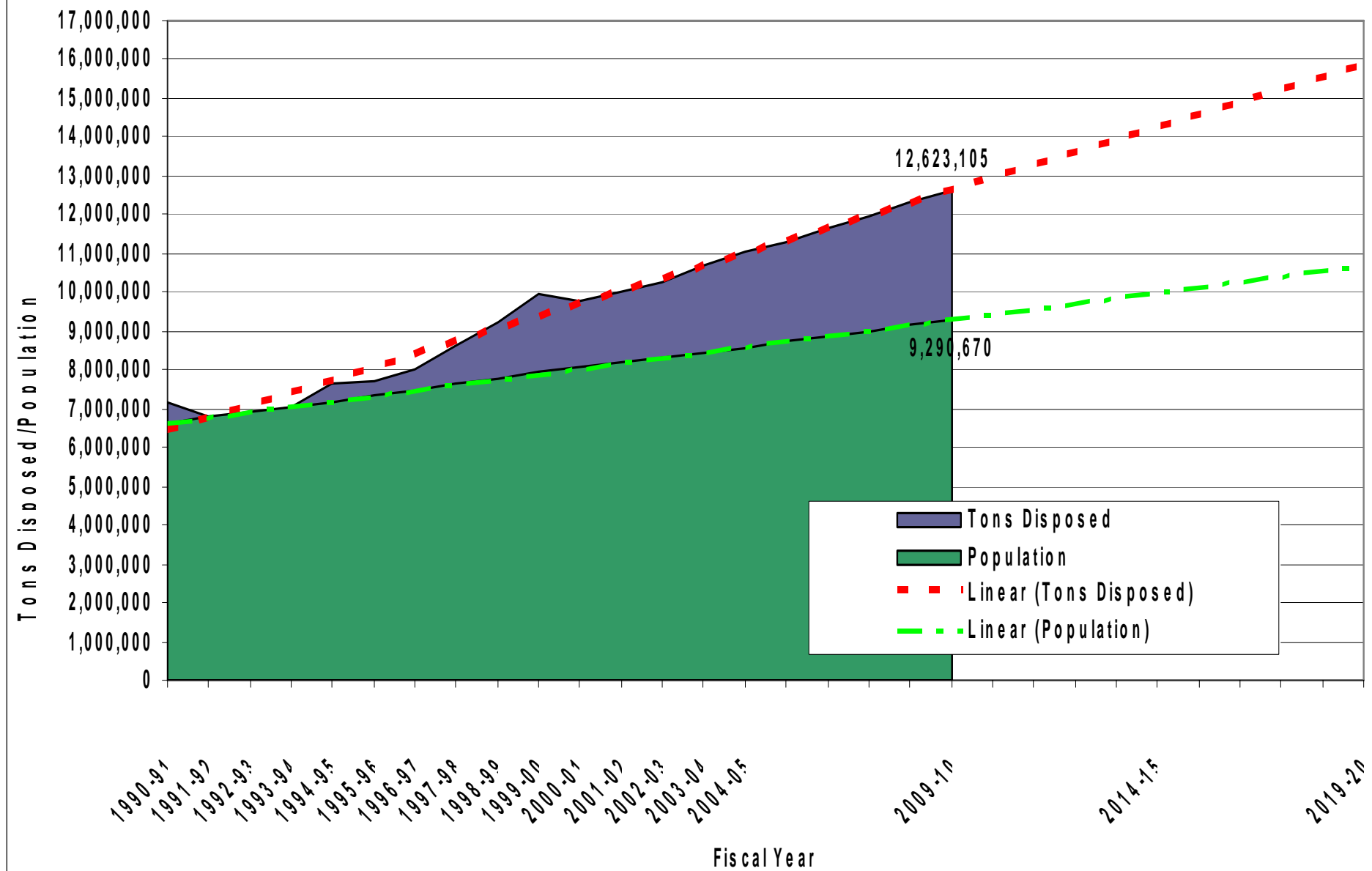
Utilization Factor (tons/yd³): 0.60

	Permitted	Total
Remaining Capacity for Tons of Waste	22,769,809.3	143,685,953.4
Remaining Capacity in Years (Lifetime TPM)	3.5	22.2
Remaining Capacity in Years (2003-2004 TPM)	3.0	18.7

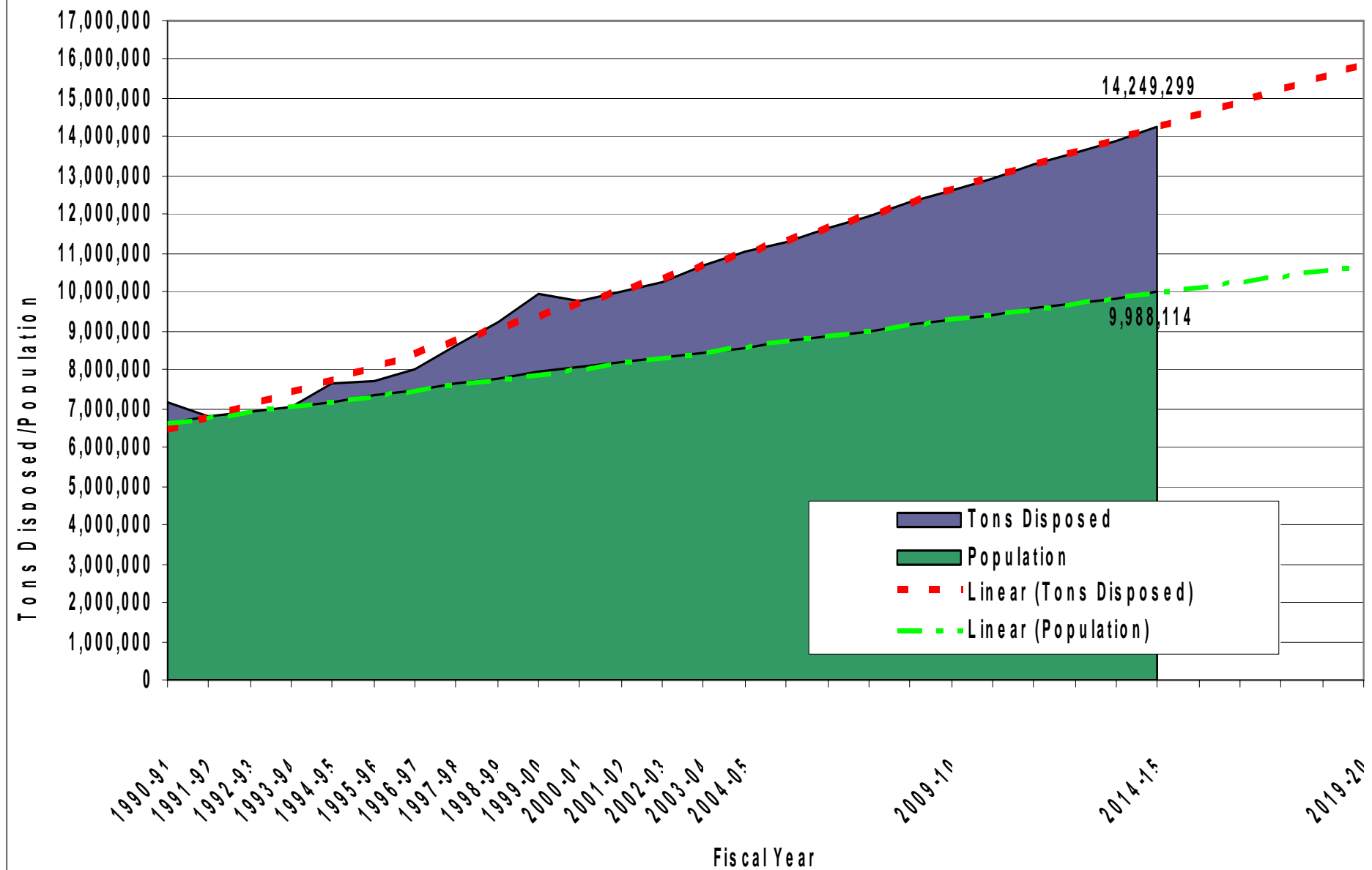
North Carolina Solid Waste Disposal Forecast



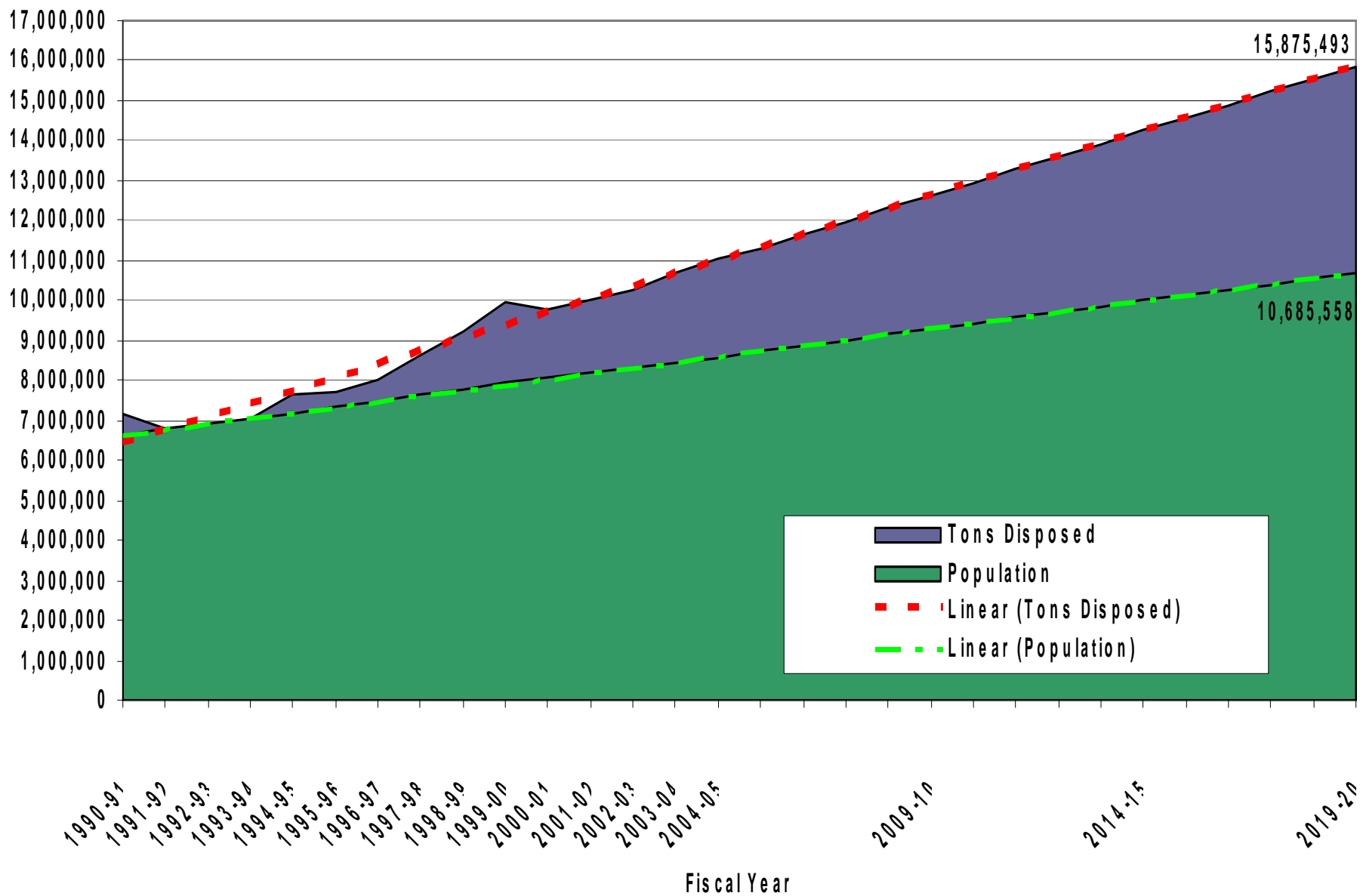
North Carolina Solid Waste Disposal Forecast



North Carolina Solid Waste Disposal Forecast



North Carolina Solid Waste Disposal Forecast



North Wake MSW Landfill

Borrow pit

Leachate lagoon

Working face

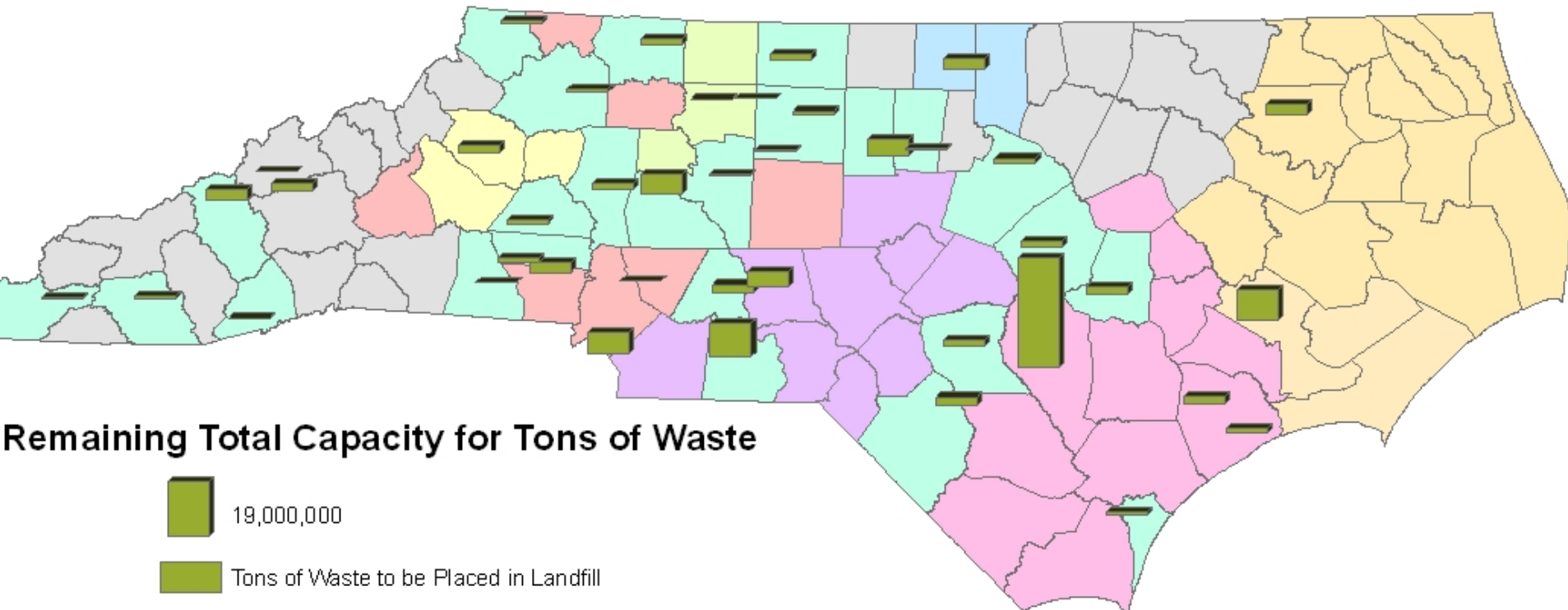
Closed cell



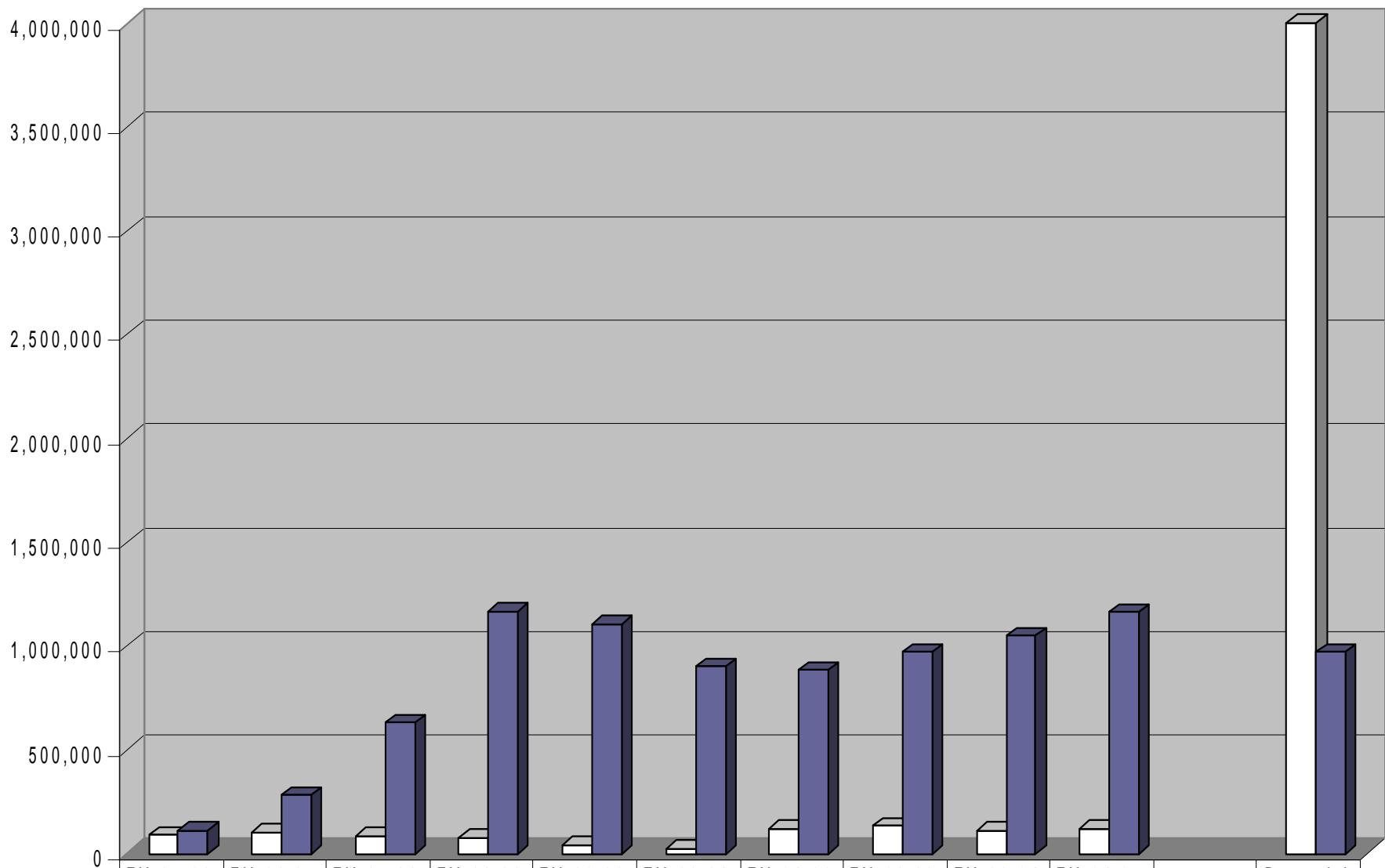
- Camden County - Black Bear- MSW
3.5 million tons/year, source- east coast
- Columbus County -Riegel Ridge- MSW
.5 million tons/year, source - 100 mile radius
- Brunswick County-Hugo Neu-
industrial process waste landfill
2 million tons/year, source - national and international
- Hyde County- Alligator River Recycling
construction and demolition waste, barge facility
.9 million tons/year, source - east coast



North Carolina Landfill Capacity



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Exports (tons)

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Solid Waste in North Carolina

The future:

More of the same

(Probably continue to have more and more waste)

Yet very different

(Probably become one of the nation's leading importers of waste)

Options

Do Nothing

Institute a tipping fee

Ban certain materials (i.e..clean wood,
cardboard)

Institute advance disposal fees (i.e. electronics)

Require program activity (i.e. recovery targets)

Five Goals Identified in the State Planning Process

- By 2010, **improve landfill technology** to secure long term protection of the environment
- By 2010, a **larger portion** of solid waste will be managed by **recycling and composting** than disposal in landfills.
- By 2010, **litter and illegal disposal shall be reduced** by 50% from 2000-2001 levels.
- By 2010, implement a **public participation** and public education program for new proposed solid waste management facilities, and existing and closed solid waste management facilities.
- By 2010 the State of North Carolina will have **adequate capacity** to manage solid waste that requires landfill disposal.