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A TALE OF TWO SUBURBS

A Comparative Analysis of the Cost of Local Governments on Long Island and in Northern Virginia

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LONG ISLAND INDEX

A TALE OF TWO SUBURBS

This report is one of a three-part Case Study comparing Long Island and Northern Virginia. The three reports are:

A Case Study Comparing Governance, Taxes and Local Services on Long Island and in Northern Virginia: Executive Summary

A Comparative Analysis of the Cost of Local Governments on Long Island and in Northern Virginia

Survey Report on Jobs, Taxes and Governance on Long Island and in Northern Virginia

All three reports are available on www.longislandindex.org.

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A TALE OF TWO SUBURBS:

A Comparative Analysis of the Cost of Local Governments on Long Island and Northern Virginia

Introduction

One of the features in the *2006 Long Island Index* was a table on page 3 that compared the two counties of Long Island with "peer" counties along a number of dimensions. Based on that table, Fairfax, Virginia stood out from the other counties in two ways – Fairfax had a much lower property tax per capita than the counties on Long Island as well as the other counties listed, and Fairfax had only 9 total municipalities, compared with 439 listed for Long Island. This led many readers of the *Index* to wonder whether or not the *cost* of local government, as reflected by the low property tax burden in Fairfax, can be explained by the *form* of governance in Fairfax. In other words, did the fact that Fairfax only had 9 local governments contribute to that county's much lower property tax burden?

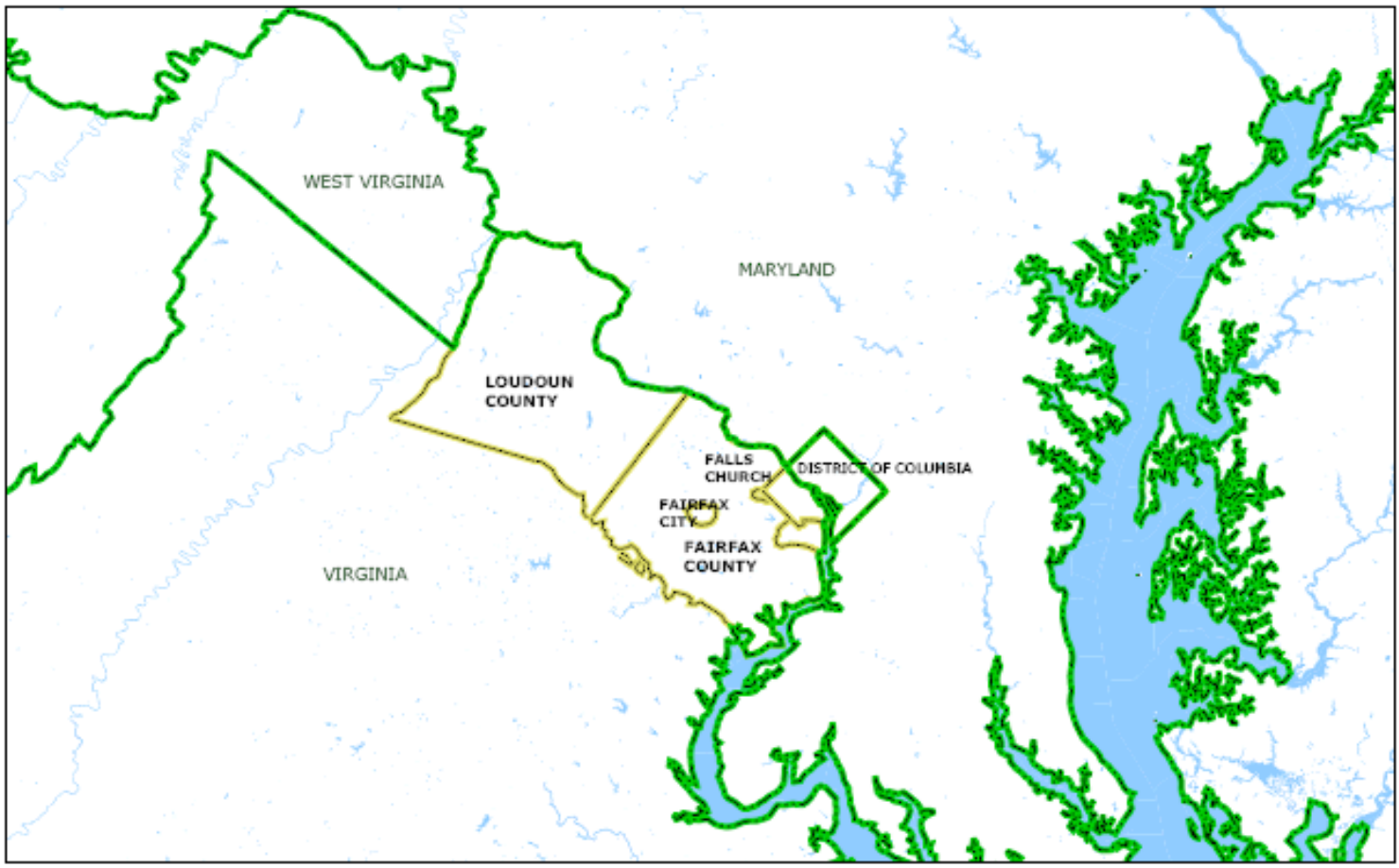
The Center for Governmental Research (CGR) prepared this special analysis for the *Long Island Index* in order to examine that question in some detail, and provide some insight into the differences in order to inform discussions about the cost and structure of local governments on Long Island. Our report has three sections. Section 1 presents a comprehensive overview of the structures, services and costs of local governments in Long Island and the region of Northern Virginia that includes Fairfax and Loudoun counties and the cities of Fairfax City and Falls Church – what CGR will call metro Northern Virginia, abbreviated as NVA. Section 2 presents a more detailed comparison of the different models used in the two regions to run the public school systems. Section 3 presents a more detailed comparison of the different models used in the two regions to deliver fire, rescue and EMS services. Taken together, these three sections highlight important similarities and differences between the regions.

Map 1

Long Island:
Nassau and Suffolk Counties

Map 2

Metro Northern Virginia:
Fairfax and Loudoun Counties and the Cities of Fairfax and Falls Church



Section 1 – Local Government Structures in Long Island and Metro Northern Virginia – Differences and Similarities

The *2006 Long Island Index* noted that there are 126 municipal corporations in Nassau County (the county, 2 cities, 3 towns, 64 villages and 56 school districts), and 113 municipal corporations in Suffolk County (the county, 10 towns, 31 villages and 71 school districts), as well as 187 fire districts, 63 sewer districts and many other special purpose districts. In total, the *Index* identified what were referred to as 901 government "entities" on Long Island in 2005[1]. This is why local government on Long Island is characterized as being fragmented, which is in stark contrast to the highly centralized local government structure in metro Northern Virginia. Before providing details about the differences between the two regions, it is necessary to explain how CGR made these comparisons.

Methodology

In order to make a fact-based comparison between the two counties in Long Island and Fairfax County, CGR chose first to match, as closely as possible, general demographic and geographic characteristics of the two regions to be compared. Our assessment concluded that adding Loudoun County, and the cities of Fairfax City and Falls Church to Fairfax County would provide a region with similar characteristics to all of Long Island (i.e. the combination of Nassau and Suffolk counties) than simply comparing Long Island to Fairfax County itself. Tables presented later in this section will present basic statistics about how the two regions compare.

Comparing the demographic and economic characteristics of the two regions was straightforward because of the availability of standardized census information. However, comparing the forms, size, function and costs of local governments within each region proved more daunting, for two reasons. First, although local governments in both New York and Virginia report fairly detailed financial information to their respective state governments, the information is not reported using common account codes or levels of detail. Second, there is no universally accepted definition for, and count of, what constitutes a "local government."

In order to make a fair "apples-to-apples" comparison of the cost of local governments in the two regions, CGR chose to use the 2002 Census of Government data. While we had hoped to be able to make a more recent comparison between the two regions, the Census provides the only data that is collected and reported in a uniform manner to allow direct comparisons across states.

In order to describe and quantify the types of local governments and local governance models, CGR had to use several different sources, recognizing that the sources do not necessarily match. A review of government structures in Nassau County will illustrate the problem.

One standard source of information about local government structures across the country is the Census of Governments. The Census Bureau provides counts and information about what it calls local government "units". The five major types of local governments reported in the census are: county

[1] *Long Island Index* 2006, pg. 49

governments; municipal governments (which include cities and villages); township governments; school district governments; and special district governments[2].

Another recognized source of information about local governments in New York State is the annual report of governments[3] prepared by the New York State Comptroller. Every local government, including special districts and local authorities, is required to report financial information to the Comptroller annually. The most recent year for which financial data is available from this source is 2004.

TABLE 1 shows the number of local government units, as reported by the 2002 census and the 2004 Comptroller's report, and, in addition, the number of special district units identified in a detailed study of special districts complete by the Nassau County Comptroller in 2005. As TABLE 1 shows, the number of units varies from 202 to 227 – a difference of 12%, for what should be an unambiguous count of easy to identify entities.

TABLE 1
Different Counts of Local Government Units for Nassau

	County	Cities/ Villages*	Villages	Towns	Special Districts**	School Districts	TOTAL
2002 U.S. Census of Governments	1	66		3	76	56	202
2004 New York State Comptroller Reports	1	2	64	3	84	56	210
2005 Nassau Comptroller Study***	1	2	64	3	101	56	227

** Census counts Cities and Villages as one group*

***Independent entities - does not include special districts run by cities,towns or villages*

**** The study did not actually address the county, cities, villages, towns and schools, but the number of these is precisely known*

TABLE 1 illustrates the dilemma faced by CGR, and anyone trying to compare local governance structures both within regions and across regions. We concluded that we would use what we believed to be the best information available to illustrate various findings presented in this report. We have used the term "unit" to refer to a local government entity as defined by the Census Bureau, rather than the broader definition of "entity" as used in the *2006 Index*[4]. We have relied on readily available data sources, supplemented by interviews with a number of government leaders and staff, especially in greater Northern Virginia (with which we were initially less familiar), to inform our understanding of local governments in the two regions.

[2] 2002 Census of Governments, Volume 1, Number 1, Government Organization issued December 2002.

[3] See http://www.osc.state.ny.us/localgov/datanstat/findata/index_choice.htm

[4] See Footnote 1

Form of Governance – Two Different Approaches

Local Government Units

There is a clear difference in the way local governments are organized to provide services in Long Island and Northern Virginia. TABLE 2 illustrates the contrast by showing the number of local governmental units in each region. Special districts were not included in TABLE 2 because it was not possible to make a precise comparison between the special districts as defined by the Census Bureau on LI and in NVA given the information available.

TABLE 2
Number of Local Government Units by Type
Not Including Special Districts

Type of Government	LI	NVA
County	2	2
City	2	2
Town	13	10
Village	95	0
School District	127	3
TOTAL	**239**	**17**

Source: NY StateComptroller, CGR survey of VA governments

The evolution of this difference has its roots in the historical role of local governmental entities within each state. New York State has permitted local governments generally to evolve under the principal of the "home rule" doctrine, which essentially allows a municipality to exercise any powers and functions which are not expressly prohibited by, or in conflict with, state statute or the state constitution. Home rule delegates power and authority to the locality, which, along with enabling state legislation, has created the opportunity for citizens to form local governmental entities to provide specialized services for themselves.

Virginia's historical approach to local government entities has been quite different. The Commonwealth of Virginia (the state's official name) has retained much more authority over the evolution of local governments. Virginia is characterized as a "Dillon's Rule" state. Dillon's Rule, named for an Iowa Supreme Court judge who in 1865 first set forth the rule, applies the logic that municipal governments may only exercise powers and functions that are expressly granted by the state or are directly related to those expressly granted by the state. This restrictive approach has, over the years, effectively centralized authority and functions in those governmental entities that have been authorized by the Virginia General Assembly through municipal charters or specific constitutional authority.

A recent research paper about Dillon's rule concluded that every state, including New York and Virginia, exhibits some degree of "home rule" local autonomy and "Dillon's rule" state control[5]. However, it is clear that the historical differences in the way each state has approached the role of local governments has played a crucial role in how government services are provided today in the two regions. In New York, the entire state is divided into counties, and within counties, there are one of two primary entities to provide local government services – either cities or towns. Every resident in New York resides in at least a county and either a city or a town. Citizens may also reside in villages or hamlets, but these exist within towns. Public school districts evolved over time based upon the needs of an expanding population, and

[5] See Jesse Richardson Jr., Meghan Zimmerman Gough, Robert Puentes, *"Is Home Rule the Anwer? Clarifying the Influence of Dillon's Rule on Growth Management",* A Discussion Paper prepared for The Brookings Institution Center on Urban and Metropolitan Policy, January 2003

independent school district boundaries were established based upon local interests. School district boundaries are not coterminous with the boundaries of other municipal boundaries (except for the five largest cities in the state). This layering of government entities in New York has resulted in the 239 primary governments found in Nassau and Suffolk counties shown in TABLE 2.[6]

In Virginia, the entire state is divided into one of two primary governments – cities and counties. There is no overlap of boundaries between the two. The General Assembly of the Commonwealth has permitted the creation of towns within counties, however, only on a case-by-case basis. Most of the areas within Virginia counties are not located within town boundaries. In fact, the three towns in Fairfax County and the seven towns in Loudoun County encompass 24.7 square miles in total – less than 3% of the total land area in the two counties, which means that residents in 97% of the land areas of the two counties have to deal directly with only one primary local government – the county. The authority to create public school systems was retained by the Commonwealth, under the direction of the Commonwealth's Board of Education. The 1902 Constitution "specifically directed each school division to comprise not less than one county or city, and that no county or city be divided."[7] Although these provisions have subsequently been changed, the practical result in the Northern Virginia area covered in this report is that there are only three public school systems, one for each county, and one in the city of Falls Church. The other city (Fairfax City) provides public school services by contracting with the Fairfax County Public Schools. These factors explain why there are only 17 local government units in metro Northern Virginia shown in TABLE 2.

Local Governance Models

As an aid to help compare the two regions, CGR will refer to the organization of local governments as the "local governance model." While there are some regional and sub-regional (county level) coordinating and planning organizations on Long Island, the local governance model can be characterized as decentralized and fragmented. The metro Northern Virginia model is, on the other hand, highly centralized. In two cases, regional delivery of services in northern Virginia is centralized in one agency: the Northern Virginia Regional Park Authority for public park planning, development and administration, and the Virginia Department of Transportation for primary road planning, development and administration. For most of the remaining primary functions of governments (to be described in detail further in this report), planning, development and administrative functions are provided by local government units – either regional agencies associated with county governments (which would be included in the census special district governments designation), or directly by the 17 town, city or county governments or school districts shown in TABLE 2.

Despite having a much more centralized local governance model, not all services are completely administered by one government unit. For example, the least centralized general government service in metro Northern Virginia is refuse and trash/debris pickup, for which there are five different models: 1. some areas are served by a county-operated refuse district; 2. some towns provide refuse service, 3. property owners associations provide service, most often through contracting; 4. some areas are served by private refuse companies contracting directly with property owners; 5. property owners haul refuse themselves to a county operated landfill. The Virginia refuse/trash approach is similar to the Long Island approach, which is characterized by a multitude of sanitation districts, town services, private companies and county-run waste disposal facilities.

[6] An excellent resource for understanding the evolution of local governments in New York is the "Local Government Handbook" published by the New York Department of State

[7] Virginia Department of Education, "Administration of Public Education in Virginia" pg.10 Available at http://dls.state.va.us/pubs/lgpe/lgpe1.pdf

One way to characterize the difference in the two local governance models is to identify the number of governmental units that provide different services. By this, we mean that a "provider" is a specific entity that has a management structure responsible for managing the resources and collecting the revenues required to deliver services. For example, on Long Island, there are 127 school districts providing public education services, in metro Northern Virginia, there are three. On Long Island, there are 63 different special purpose units (as identified by the New York State Comptroller) that provide public library services; in metro Northern Virginia, public libraries are provided by four government units. On Long Island, there are 179 fire departments (identified in the *Newsday* report dated November 13, 2005), in metro Northern Virginia there are 21 fire departments, centrally funded and managed by four government units.

Another way to understand the impact of the fragmented local governance model on Long Island is to identify the number of local government units that fund expenditures for the various services provided to Long Islanders. The distinction between being a funder and a provider is this – a funder has to have an organizational structure that collects and distributes funds to have services provided, but a funder is not necessarily a service provider. For example, on Long Island, some towns fund fire departments, but the actual provision of fire services is made by the fire department which operates as a separate and independent unit. Each time a local government unit funds provides funding for a service in its budget, this requires that governmental unit to make a conscious public policy decision, on an annual basis, to provide the service. If the local government unit both funds and provides that service, then both the funding and delivery decisions are made by the same single organization. However, when the local government unit only provides funds for a service, and contracts with a different service provider which is also a government unit, (such as contracting with a fire department for fire/EMS services, a refuse district for trash pickup, a water district for water service, etc.), then at least two governments are involved in the process of delivering the service.

CGR believes that one way to illustrate local government fragmentation is to identify the number of government units involved in funding decisions in a region. Since each government funder has its own organization and decision making rules, increasing the number of funders by definition increase duplication of effort and the complexity of making decisions that affect delivery of services. To illustrate this point, CGR created TABLE 3.

In order to create TABLE 3, CGR identified all local government units in Long Island and metro Northern Virginia that had annual expenses of at least $10,000 in each of the functional areas identified. For purposes of this discussion, CGR equates expenditures to funding, i.e. if a government had expenditures for a service, it funded that service. However, funding the service, as noted above, does not necessarily mean providing the service – a government that funds a service may, or may not, also actually provide the service as a government operation. The services shown in TABLE 3 were selected because they match functional cost categories shown in TABLE 6, except that the Solid Waste and Sewerage categories from TABLE 6 had to be combined (because available data for Long Island governments had the categories combined). To review, TABLE 3 does not identify service *providers*, rather, it identifies service *funders* in the functional areas shown.

TABLE 3
Units of Governments Funding at Least $10,000 to the Functions Shown in 2002-2004

	Long Island Governments				
FUNCTION	**County**	**Cities**	**Towns**	**Villages**	**TOTALS**
Financial Administration	2	2	13	85	**102**
Fire Protection	2	2	10	74	**88**
Judicial/Legal	2	1	7	69	**79**
Libraries			4	17	**21**
Parks and Recreation	2	2	13	57	**74**
Police Protection	2	2	11	51	**66**
Sewers & Solid Waste Mgt	2	2	13	76	**93**
Water	1	2	11	19	**33**
Highways/DPW	2	2	13	93	**110**
	Metro Northern Virginia Governments				
	Counties	**Cities**	**Towns**		**TOTALS**
Financial Administration	2	2	9		**13**
Fire Protection	2	2	1		**5**
Judicial/Legal	2	2	3		**7**
Libraries	2	1	1		**4**
Parks and Recreation	2	2	5		**9**
Police Protection	2	2	5		**9**
Sewers & Solid Waste Mgt	2	2	8		**12**
Water	1	2	8		**11**
Highways/DPW	2	2	5		**9**

Source - 2002 Census of Governments, CGR Survey of Municipal Operations, N.Y. State Comptroller 2004 data

In summary, TABLE 3 presents another way of understanding the difference in the governance models found on Long Island and in metro Northern Virginia. TABLE 2, in conjunction with TABLE 3 demonstrates how complex the government decision-making processes are on Long Island. For example, 21 primary local government units (not including special districts) were involved in making funding decisions about the provision of library services on Long Island, while in metro Northern Virginia, only four primary government units were involved. Sixty-six primary government units were involved in police budgeting decisions on Long Island, compared with four in metro Northern Virginia. In every case, many more governments on Long Island were involved in decisions about funding core governmental services than in metro Northern Virginia.

Expenses – How the Local Governments Compare

The 2002 Census of Governments provides the most uniform set of data for comparing spending by local governments in LI and NVA. CGR extracted all the expenditure data provided on the census web site, and then created tables that combined the information from individual governmental units and aggregated spending to the regional level.

TABLE 4 provides three basic indicators that could be used to adjust for size differences between the LI and NVA: population, housing units and land area. CGR has chosen to make comparisons on a per capita basis. Absolute dollar amounts are shown where it is useful to give the reader an understanding of the scale of local government operations, but reporting on a per capita basis will offer a more balanced perspective on the relative size of local government expenditures in the two regions.

TABLE 4
Basic Comparisons - L.I. vs. Metro Northern Virginia

	Population	Housing Units	Size
	2005	2005	Sq. Miles
Nassau	1,310,076	456,011	287
Suffolk	1,444,642	538,826	912
Total Combined	**2,754,718**	**994,837**	**1199**
Fairfax County	998,690	386,856	395
Loudoun County	254,612	93,374	521
Fairfax City	21,963	8,576	6
Falls Church City	10,781	4,691	2
Total Combined	**1,286,046**	**493,497**	**924**

Source: 2005 American Community Survey

TABLE 5A shows, by major expense category, that local governments (local government units as defined by the Census Bureau) on Long Island spent $15.54 billion in 2002 according to the Census of Governments, while those in metro Northern Virginia spent $4.718 billion. On a per capita adjusted basis, Long Island governments spent $5,562 per capita, which equated to $1,722, or 44.8% more than the $3,840 per capita spent by local governments in metro Northern Virginia[8].

[8] Since the financial information is based on 2002 figures, CGR used 2002 population estimates (2,794,306 for LI and 1,228,457 for NVA) to create per capita figures in the following tables.

TABLE 5A
Total Spent by Local Governments in 2002 by Major Category of Expense

Census Category	Census Description	LI $ in Billions	LI $ per Capita	LI % of Total	NVA $ in Billions	NVA $ per Capita	NVA % of Total	Per Capita Difference LI-NVA
E	Current Operations	$ 12.652	$ 4,528	81.4%	$ 3.629	$ 2,954	76.9%	$ 1,574
F	Capital Costs: New Construction	$ 1.126	$ 403	7.2%	$ 0.542	$ 441	11.5%	$ (38)
G	Capital Costs, Land and Existing Constr.	$ 0.421	$ 151	2.7%	$ 0.029	$ 23	0.6%	$ 128
I	Interest on Debt	$ 0.578	$ 207	3.7%	$ 0.188	$ 153	4.0%	$ 54
K	Capital Costs: Equipment	$ 0.080	$ 29	0.5%				$ 29
L	Payments to State	$ 0.625	$ 224	4.0%	$ 0.015	$ 12	0.3%	$ 211
M	Payments to Local Government	$ 0.058	$ 21	0.4%	$ 0.096	$ 78	2.0%	$ (57)
X	Public Empl. Retirement Systems				$ 0.219	$ 178	4.6%	$ (178)
	TOTAL	**$ 15.540**	**$ 5,562**	**100.0%**	**$ 4.718**	**$ 3,840**	**100.0%**	**$ 1,722**

Source: 2002 Census of Governments, 2002 population estimates from ACS

While TABLE 5A provides a high level summary of the expenditure differences between LI and NVA, TABLE 5B gives a more detailed expenditure breakdown comparison. TABLE 5B lists every category of expense provided by the Census of Governments. Together, TABLES 5A and 5B indicate how local governments in the two regions chose to spend public dollars in 2002[9].

[9] A more detailed description of each census category is available at http://www.census.gov/govs/www/class.html

TABLE 5B
Total Spent by Local Governments in 2002 by All Categories of Expense

		LI			NVA		
Census	Description of Source	$ in Billions	$ per Capita	% of Total	Total $	$ per Capita	% of Total
Category	**GRAND TOTAL**	**$ 15.542**	**$ 5,562**	**100.0%**	**$ 4.717**	**$ 3,840**	**100.0%**
E	**Current Operations Total**	**$ 12.653**	**$ 4,528**	**81.4%**	**$ 3.629**	**$ 2,954**	**76.9%**
E01	Air Transportation (Airports)	$ 0.005	$ 2	0.0%	$ -	$ -	0.0%
E05	Other Corrections	$ 0.271	$ 97	1.7%	$ 0.042	$ 34	0.9%
E12	Elementary and Secondary Education	$ 6.579	$ 2,355	42.3%	$ 1.847	$ 1,504	39.2%
E18	Other Higher Education	$ 0.264	$ 94	1.7%	$ -	$ -	0.0%
E23	Financial Administration	$ 0.111	$ 40	0.7%	$ 0.054	$ 44	1.1%
E24	Fire Protection	$ 0.212	$ 76	1.4%	$ 0.129	$ 105	2.7%
E25	Judicial and Legal	$ 0.139	$ 50	0.9%	$ 0.045	$ 36	0.9%
E29	Central Staff Services	$ 0.120	$ 43	0.8%	$ 0.049	$ 40	1.0%
E31	General Public Buildings	$ 0.081	$ 29	0.5%	$ 0.056	$ 46	1.2%
E32	Other Health	$ 0.298	$ 107	1.9%	$ 0.165	$ 134	3.5%
E36	Own Hospitals (except Federal Veterans)	$ 0.333	$ 119	2.1%	$ -	$ -	0.0%
E44	Regular Highways	$ 0.214	$ 76	1.4%	$ 0.026	$ 22	0.6%
E45	Toll Highways	$ 0.004	$ 2	0.0%	$ -	$ -	0.0%
E50	Housing and Community Development	$ 0.123	$ 44	0.8%	$ 0.091	$ 74	1.9%
E52	Libraries	$ 0.181	$ 65	1.2%	$ 0.035	$ 29	0.7%
E59	Other Natural Resources	$ 0.019	$ 7	0.1%	$ 0.006	$ 5	0.1%
E60	Parking Facilities	$ 0.005	$ 2	0.0%	$ 0.004	$ 3	0.1%
E61	Parks and Recreation	$ 0.290	$ 104	1.9%	$ 0.150	$ 122	3.2%
E62	Police Protection	$ 1.096	$ 392	7.0%	$ 0.191	$ 156	4.1%
E66	Protective Inspection and Regulation, NEC	$ 0.031	$ 11	0.2%	$ 0.017	$ 14	0.4%
E67	Federal Categorical Assistance Programs	$ 0.071	$ 25	0.5%	$ 0.003	$ 3	0.1%
E68	Other Cash Assistance Programs	$ 0.059	$ 21	0.4%	$ 0.016	$ 13	0.3%
E74	For Medical Care				$ 0.004	$ 3	0.1%
E75	For Other Purposes	$ 0.018	$ 6	0.1%	$ 0.002	$ 2	0.0%
E77	Welfare Institutions	$ 0.126	$ 45	0.8%	$ -	$ -	0.0%
E79	Other Public Welfare	$ 0.229	$ 82	1.5%	$ 0.198	$ 161	4.2%
E80	Sewerage	$ 0.160	$ 57	1.0%	$ 0.084	$ 69	1.8%
E81	Solid Waste Management	$ 0.424	$ 152	2.7%	$ 0.102	$ 83	2.2%
E87	Water Transport and Terminals	$ 0.001	$ 0	0.0%	$ -	$ -	0.0%
E89	Other and Unallocable	$ 0.966	$ 346	6.2%	$ 0.219	$ 178	4.6%
E91	Water Supply	$ 0.156	$ 56	1.0%	$ 0.064	$ 52	1.4%
E92	Electric Power	$ 0.034	$ 12	0.2%	$ -	$ -	0.0%
E94	Public Mass Transit Systems	$ 0.032	$ 11	0.2%	$ 0.029	$ 24	0.6%
F	**Cap. Outlay: Construction**	**$ 1.126**	**$ 403**	**7.2%**	**$ 0.542**	**$ 441**	**11.5%**
F01	Air Transportation (Airports)	$ -	$ -	0.0%	$ -	$ -	0.0%
F05	Other Corrections	$ 0.003	$ 1	0.0%	$ -	$ -	0.0%
F12	Elementary and Secondary Education	$ 0.566	$ 202	3.6%	$ 0.345	$ 281	7.3%
F18	Other Higher Education	$ 0.004	$ 1	0.0%	$ -	$ -	0.0%
F23	Financial Administration	$ -	$ -		$ 0.000	$ 0	0.0%
F24	Fire Protection	$ 0.034	$ 12	0.2%	$ -	$ -	0.0%
F25	Judicial and Legal	$ 0.000	$ 0	0.0%	$ -	$ -	0.0%
F31	General Public Buildings	$ 0.021	$ 7	0.1%	$ 0.000	$ 0	0.0%
F32	Other Health	$ 0.002	$ 1	0.0%	$ -	$ -	0.0%
F36	Own Hospitals (except Federal Veterans)	$ 0.001	$ 0	0.0%	$ -	$ -	0.0%
F44	Regular Highways	$ 0.182	$ 65	1.2%	$ 0.034	$ 27	0.7%
F45	Toll Highways	$ 0.005	$ 2	0.0%	$ -	$ -	0.0%
F50	Housing and Community Development	$ -	$ -		$ 0.006	$ 5	0.1%
F52	Libraries	$ 0.004	$ 2	0.0%	$ 0.005	$ 4	0.1%
F59	Other Natural Resources	$ 0.007	$ 2	0.0%	$ -	$ -	0.0%
F60	Parking Facilities	$ -	$ -		$ 0.000	$ 0	0.0%
F61	Parks and Recreation	$ 0.048	$ 17	0.3%	$ 0.021	$ 17	0.4%
F62	Police Protection	$ 0.008	$ 3	0.1%	$ 0.000	$ 0	0.0%
F77	Welfare Institutions	$ 0.000	$ 0	0.0%	$ -	$ -	0.0%
F80	Sewerage	$ 0.022	$ 8	0.1%	$ 0.006	$ 5	0.1%
F81	Solid Waste Management	$ 0.018	$ 7	0.1%	$ -	$ -	0.0%
F89	Other and Unallocable	$ 0.115	$ 41	0.7%	$ 0.105	$ 85	2.2%
F91	Water Supply	$ 0.069	$ 25	0.4%	$ 0.003	$ 3	0.1%
F94	Public Mass Transit Systems	$ 0.016	$ 6	0.1%	$ 0.016	$ 13	0.3%

TABLE 5B - Page 2 of 2									
G	**Cap. Outlay: Land and Existing Structures**	**$ 0.421**	**$ 151**	**2.7%**	**$ 0.029**	**$ 23**	**0.6%**
G01	Air Transportation (Airports)	$ 0.000	$ 0	0.0%	$ -	$ -	0.0%
G05	Other Corrections	$ 0.002	$ 1	0.0%	$ -	$ -	0.0%
G12	Elementary and Secondary Education	$ 0.093	$ 33	0.6%	$ 0.006	$ 5	0.1%
G18	Other Higher Education	$ 0.000	$ 0	0.0%	$ -	$ -	0.0%
G23	Financial Administration	$ 0.009	$ 3	0.1%	$ 0.000	$ 0	0.0%
G24	Fire Protection	$ 0.045	$ 16	0.3%	$ 0.000	$ 0	0.0%
G25	Judicial and Legal	$ 0.001	$ 0	0.0%	$ -	$ -	0.0%
G29	Central Staff Services	$ 0.002	$ 1	0.0%	$ 0.000	$ 0	0.0%
G31	General Public Buildings	$ 0.003	$ 1	0.0%	$ 0.000	$ 0	0.0%
G32	Other Health	$ 0.002	$ 1	0.0%	$ -	$ -	0.0%
G36	Own Hospitals (except Federal Veterans)	$ 0.001	$ 0	0.0%	$ -	$ -	0.0%
G44	Regular Highways	$ 0.016	$ 6	0.1%	$ 0.000	$ 0	0.0%
G50	Housing and Community Development	$ 0.003	$ 1	0.0%	$ -	$ -	0.0%
G52	Libraries	$ 0.011	$ 4	0.1%	$ -	$ -	0.0%
G59	Other Natural Resources	$ 0.019	$ 7	0.1%	$ -	$ -	0.0%
G60	Parking Facilities	$ 0.000	$ 0	0.0%	$ -	$ -	0.0%
G61	Parks and Recreation	$ 0.010	$ 4	0.1%	$ 0.001	$ 1	0.0%
G62	Police Protection	$ 0.015	$ 5	0.1%	$ 0.000	$ 0	0.0%
G66	Protective Inspection and Regulation, NEC	$ 0.000	$ 0	0.0%	$ 0.000	$ 0	0.0%
G77	Welfare Institutions	$ 0.000	$ 0	0.0%	$ -	$ -	0.0%
G79	Other Public Welfare	$ 0.001	$ 0	0.0%	$ 0.003	$ 3	0.1%
G80	Sewerage	$ 0.001	$ 0	0.0%	$ 0.000	$ 0	0.0%
G81	Solid Waste Management	$ 0.003	$ 1	0.0%	$ 0.000	$ 0	0.0%
G87	Water Transport and Terminals	$ 0.000	$ 0	0.0%	$ -	$ -	0.0%
G89	Other and Unallocable	$ 0.025	$ 9	0.2%	$ 0.017	$ 13	0.4%
G91	Water Supply	$ 0.017	$ 6	0.1%	$ 0.000	$ 0	0.0%
G94	Public Mass Transit Systems	$ 0.144	$ 52	0.9%	$ -	$ -	0.0%
I	**Interest on Debt: Total**	**$ 0.578**	**$ 207**	**3.7%**	**$ 0.188**	**$ 153**	**4.0%**
I89	Interest on General Debt	$ 0.546	$ 195	3.5%	$ 0.162	$ 132	3.4%
I91	Water Supply	$ 0.031	$ 11	0.2%	$ 0.026	$ 21	0.5%
I92	Electric Power	$ 0.001	$ 1	0.0%	$ -	$ -	0.0%
I94	Public Mass Transit Systems	$ -	$ -	0.0%	$ 0.000	$ 0	0.0%
K	**Cap. Outlay: Equipment**	**$ 0.081**	**$ 29**	**0.5%**	**$ -**	**$ -**	0.0%
K12	Elementary and Secondary Education	$ 0.081	$ 29	0.5%	$ -	$ -	0.0%
L	**Intergovernmental to State: Highways**	**$ 0.625**	**$ 224**	**4.0%**	**$ 0.015**	**$ 12**	**0.3%**
L05	Other Corrections	$ 0.007	$ 2	0.0%	$ -	$ -	0.0%
L12	Elementary and Secondary Education	$ 0.005	$ 2	0.0%	$ -	$ -	0.0%
L24	Fire Protection	$ 0.000	$ 0	0.0%	$ -	$ -	0.0%
L25	Judicial and Legal	$ 0.019	$ 7	0.1%	$ -	$ -	0.0%
L44	Intergovernmental to State: Highways				$ 0.015	$ 12	0.3%
L67	Federal Categorical Assistance Programs	$ 0.477	$ 171	3.1%	$ -	$ -	0.0%
L89	Other and Unallocable	$ 0.053	$ 19	0.3%	$ -	$ -	0.0%
L94	Public Mass Transit Systems	$ 0.064	$ 23	0.4%	$ -	$ -	0.0%
M	**Intergovernmental to Local Gov. Total**	**$ 0.058**	**$ 21**	**0.4%**	**$ 0.096**	**$ 78**	**2.0%**
M05	Other Corrections	$ -	$ -	0.0%	$ 0.001	$ 1	0.0%
M12	Elementary and Secondary Education	$ 0.000	$ 0	0.0%	$ 0.025	$ 21	0.5%
M18	Other Higher Education	$ -	$ -	0.0%	$ 0.000	$ 0	0.0%
M23	Financial Administration	$ 0.003	$ 1	0.0%	$ -	$ -	0.0%
M24	Fire Protection	$ 0.000	$ 0	0.0%	$ 0.001	$ 1	0.0%
M25	Judicial and Legal	$ -	$ -	0.0%	$ 0.001	$ 0	0.0%
M32	Other Health	$ -	$ -	0.0%	$ 0.001	$ 0	0.0%
M50	Housing and Community Development	$ 0.004	$ 2	0.0%	$ -	$ -	0.0%
M52	Libraries	$ 0.001	$ 0	0.0%	$ 0.001	$ 1	0.0%
M79	Other Public Welfare	$ -	$ -	0.0%	$ 0.002	$ 1	0.0%
M80	Sewerage	$ -	$ -	0.0%	$ 0.048	$ 39	1.0%
M89	Other and Unallocable	$ 0.049	$ 18	0.3%	$ 0.001	$ 1	0.0%
M91	Water Supply	$ -	$ -	0.0%	$ -	$ -	0.0%
M94	Public Mass Transit Systems	$ -	$ -	0.0%	$ 0.016	$ 13	0.3%
X11-14	**Public Empl. Retirement Systems Total**	**$ -**	**$ -**	**0.0%**	**$ 0.219**	**$ 178**	**4.6%**
X11	X11	$ -	$ -	0.0%	$ 0.212	$ 173	4.5%
X12	X12	$ -	$ -	0.0%	$ 0.007	$ 6	0.1%
Z00	**Salaries and Wages***	**$ 7.112**	**$ 2,545**	**45.8%**	**$ 1.381**	**$ 1,124**	**29.3%**

Source: 2002 Census of Governments, 2002 population estimates from ACS

** Salaries and Wages are an object, not a function, therefore they are already included in the separate function lines and are not included in the Grand Tota*

I.

CGR used the data in TABLE 5B to identify how much each region spent on some specific functions in 2002. The resulting TABLE 6 shows the breakdown of expenditures in each region by major function, for all expense categories for that function[10]. TABLE 6 indicates several key differences in how local governments in the two regions chose to spend funds, based upon comparing per capita expenditures:

- Governments in both Long Island and metro Northern Virginia allocated almost exactly the same *percentage* of total expenditures for public education, however, on an absolute basis, LI spent $834, or 45.9% more per capita than NVA,

- Spending for Police services was substantially higher on Long Island than metro Northern Virginia – Long Island spent $244, or 156% more per capita than NVA,

- Differences in the roles local governments play in the larger context of the states[11] - for highway costs, Medicaid costs, local community college costs and local community run hospital costs – account for $476 of the per capita expenditure differences (27.6% of the total difference of $1,722) between Long Island and metro Northern Virginia. Long Island local governments spent 2.7% of total expenditures on Highways compared with just 1.3% in metro Northern Virginia, Long Island governments (the counties) spent 6.2% on public assistance programs, which included Medicaid, compared with 4.7% in metro Northern Virginia, Long Island governments spent 2.1% on community hospital costs versus no expenditures in metro Northern Virginia., and Long Island governments spent 1.7% on higher education (community college) costs versus no expenditures in metro Northern Virginia.

- Metro Northern Virginia spending was higher than Long Island in three areas: parks and recreation, sewers, and fire services. An analysis of the difference between the Long Island and metro Northern Virginia models in one of these areas - fire services - will be presented in Section 3.

- The All Other category in TABLE 6 includes all remaining functional areas listed in TABLE 5B. None of the remaining functional areas amounted to more than 1% of total expenditures.

[10] For example, the two digit expense for Elementary and Secondary Education – 12 – included expenditures in major categories E (Current Operations), F (Capital Outlay – Construction), G (Capital Outlay – Land and Existing Structures), etc.

[11] To be discussed in more detail later in this section

TABLE 6
Total Spent by Local Governments in 2002 by Major Function
Includes Current Operations, Capital, Debt Interest and all Other Costs

Census Expense Categories	Major Function of Expense	LI $ in Billions	LI $ per Capita	LI % of Total	NVA $ in Billions	NVA $ per Capita	NVA % of Total	Per Capita Difference LI - NVA
12	Elem. & Second. Education	$ 7.405	$ 2,650	47.6%	$ 2.231	$ 1,816	47.3%	$ 834
62	Police Protection	$ 1.119	$ 400	7.2%	$ 0.192	$ 156	4.1%	$ 244
67,68,77,79	Public Assistance Programs	$ 0.964	$ 345	6.2%	$ 0.222	$ 181	4.7%	$ 164
44	Highways	$ 0.411	$ 147	2.6%	$ 0.061	$ 50	1.3%	$ 97
81	Solid Waste Management	$ 0.446	$ 160	2.9%	$ 0.102	$ 83	2.2%	$ 77
61	Parks & Recreation	$ 0.349	$ 125	2.2%	$ 0.171	$ 139	3.6%	$ (14)
36	Own Hospitals	$ 0.335	$ 120	2.2%	$ -	$ -		$ 120
24	Fire Protection	$ 0.291	$ 104	1.9%	$ 0.130	$ 106	2.8%	$ (2)
18	Higher Education	$ 0.268	$ 96	1.7%	$ -	$ -	0.0%	$ 96
91	Water Supply	$ 0.242	$ 87	1.6%	$ 0.068	$ 55	1.4%	$ 31
52	Libraries	$ 0.207	$ 74	1.3%	$ 0.041	$ 33	0.9%	$ 41
80	Sewerage	$ 0.183	$ 65	1.2%	$ 0.139	$ 113	2.9%	$ (48)
25	Judicial/Legal	$ 0.159	$ 57	1.0%	$ 0.045	$ 37	1.0%	$ 20
23	Financial Administration	$ 0.124	$ 44	0.8%	$ 0.055	$ 45	1.2%	$ (0)
	All Other	$ 3.039	$ 1,088	19.6%	$ 1.260	$ 1,026	26.7%	$ 62
	TOTAL	**$ 15.542**	**$ 5,562**	**100.0%**	**$ 4.717**	**$ 3,840**	**100.0%**	**$ 1,722**

Source: 2002 Census of Governments, 2002 population estimates from ACS

To summarize our comparisons of how local governments in LI and NVA spent funds in 2004, Long Island governments spent $1,722 per capita, or 44.8% more than their counterparts in metro Northern Virginia. TABLE 6 shows where LI spent more money, on an absolute basis, on a function-by-function basis. While TABLE 6 provides a comparison by function of expense, the Census only provides one comparison for *object*, or type of expense, for current operations. Census category Z00 (last line of TABLE 5B) indicates that, in 2004, LI governments spend $7.112 billion on salaries and wages, or $2,545 per capita, whereas NVA governments spent $1.381 billion, or $1,124 per capita. The difference between the regions - $1,421 per capita, is equal to 82.5% of the total difference of $1,722 per capita. It was beyond the scope of this project to determine to what extent this difference was due to the number of local government employees versus differences in the underlying salary structures of the two regions. However, this is a difference that should be explored in more detail.

Revenues – How Local Governments Compare

CGR used the 2002 Census of Governments revenue data provided on the census web site, created tables that combined the information from individual governmental units and then aggregated revenue to the regional level to create TABLES 7A and 7B. These show the sources of revenues used by local governments to support the expenditures noted in TABLES 5A and 5B. Revenues shown in TABLES 7A and 7B do not quite match the expenditures shown in the TABLES 5A and 5B because of timing difference between when revenues and expenses are recognized, and because revenues shown do not include debt financing (whereas payment of debt principal and interest is counted as an expense.)

TABLE 7A
Revenues for Local Governments in 2002 by Major Source

Census Revenue Categories	Description of Source	LI $ in Billions	LI $ per Capita	LI % of Total	NVA $ in Billions	NVA $ per Capita	NVA % of Total	Per Capita Difference LI-NVA
A	**Current Charges/Fees**	$ 1.028	$ 368	7.0%	$ 0.403	$ 328	9.2%	$ 40
B	**Federal Intergovernmental Revenue**	$ 0.169	$ 60	1.1%	$ 0.930	$ 76	2.1%	$ (16)
	State Education Funding	*$ 2.695*	*$ 965*	*18.3%*	*$ 0.475*	*$ 387*	*10.8%*	*$ 578*
	Other State Funding	*$ 1.122*	*$ 401*	*7.6%*	*$ 0.479*	*$ 390*	*10.9%*	*$ 11*
C	**State Intergovernmental Revenue**	$ 3.817	$ 1,366	26.0%	$ 0.954	$ 777	21.8%	$ 589
D	**Local Intergovernmental Revenue**	$ 0.222	$ 80	1.5%	$ 0.028	$ 23	0.6%	$ 57
	Property Tax	*$ 6.768*	*$ 2,422*	*46.1%*	*$ 1.915*	*$ 1,559*	*43.7%*	*$ 863*
	Sales and Gross Receipts Tax	*$ 1.598*	*$ 572*	*10.9%*	*$ 0.184*	*$ 150*	*4.2%*	*$ 422*
	Other Local Tax Revenue	*$ 0.242*	*$ 87*	*1.7%*	*$ 0.366*	*$ 297*	*8.3%*	*$ (210)*
E	**Local Tax Revenue**	$ 8.608	$ 3,081	58.6%	$ 2.465	$ 2,006	56.2%	$ 1,075
	Interest Earnings	*$ 0.274*	*$ 98*	*1.9%*	*$ 0.143*	*$ 116*	*3.2%*	*$ (18)*
	All Other	*$ 0.313*	*$ 112*	*2.1%*	*$ 0.120*	*$ 244*	*6.8%*	*$ (132)*
U	**Miscellaneous Revenue**	$ 0.587	$ 210	4.0%	$ 0.263	$ 360	10.1%	$ (150)
	TOTAL - All Revenues	**$ 14.695**	**$ 5,259**	**100.0%**	**$ 4.386**	**$ 3,570**	**100.0%**	**$ 1,689**

Source: 2002 Census of Governments, 2002 population estimates from ACS

While TABLE 7A provides a high level summary of the revenue differences between LI and NVA, TABLE 7B gives a more detailed breakdown of differences in revenue sources. TABLE 7B lists every category of revenue for local governments provided by the Census of Governments.

	TABLE 7B						
	Revenues for Local Governments in 2002 by All Source, in $Billions						
		LI			NVA		
Census	Description of Source	Total $	$ per Capita	% of Total	Total $	$ per Capita	% of Total
Revenue	**GRAND TOTAL**	**$ 14.695**	**$ 5,259**	**100.0%**	**$ 4.386**	**$ 3,570**	**100.0%**
Categories							
A	**Current Charges Total**	**$ 1.028**	**$ 368**	**7.0%**	**$ 0.403**	**$ 328**	**9.2%**
A01	Air Transportation (Airports)	$ 0.014	$ 5	0.1%	$ 0.001	$ 1	0.0%
A09	School Lunch	$ 0.068	$ 24	0.5%	$ 0.052	$ 42	1.2%
A10	School Tuition	$ 0.013	$ 5	0.1%	$ 0.013	$ 10	0.3%
A12	Elementary and Secondary Education	$ 0.004	$ 2	0.0%	$ 0.000	$ 0	0.0%
A18	School Lunch	$ 0.093	$ 33	0.6%	$ -	$ -	0.0%
A36	School Tuition	$ 0.212	$ 76	1.4%	$ -	$ -	0.0%
A45	Other Elementary and Secundary Education	$ 0.008	$ 3	0.1%	$ -	$ -	0.0%
A50	Housing and Community Development	$ 0.004	$ 1	0.0%	$ 0.014	$ 12	0.3%
A59	Other Natural Resources				$ 0.000	$ 0	0.0%
A60	Parking Facilities	$ 0.008	$ 3	0.1%	$ 0.000	$ 0	0.0%
A61	Parks and Recreation	$ 0.095	$ 34	0.6%	$ 0.050	$ 41	1.1%
A80	Sewerage	$ 0.045	$ 16	0.3%	$ 0.138	$ 113	3.2%
A81	Solid Waste Management	$ 0.183	$ 66	1.2%	$ 0.083	$ 68	1.9%
A89	All Other	$ 0.283	$ 101	1.9%	$ 0.051	$ 42	1.2%
A91-94	**Utility Revenue**	**$ 0.262**	**$ 94**	**1.8%**	**$ 0.144**	**$ 118**	**3.3%**
A91	Water Supply	$ 0.218	$ 78	1.5%	$ 0.142	$ 116	3.2%
A92	Electric Power	$ 0.038	$ 14	0.3%	$ -	$ -	0.0%
A94	Public Mass Transit Systems	$ 0.006	$ 2	0.0%	$ 0.002	$ 2	0.0%
B	**Federal Intergov. Revenue Total**	**$ 0.169**	**$ 60**	**1.1%**	**$ 0.093**	**$ 76**	**2.1%**
B21	Education	$ 0.011	$ 4	0.1%	$ 0.008	$ 7	0.2%
B30	General Local Support				$ 0.004	$ 3	0.1%
B42	Health and Hospitals				$ 0.019	$ 15	0.4%
B46	Highways	$ 0.014	$ 5	0.1%	$ 0.000	$ 0	0.0%
B50	Housing and Community Development	$ 0.054	$ 19	0.4%	$ 0.044	$ 36	1.0%
B79	Public Welfare	$ 0.028	$ 10	0.2%	$ 0.001	$ 1	0.0%
B80	Sewerage	$ 0.021	$ 8	0.1%	$ -	$ -	0.0%
B89	All Other	$ 0.041	$ 15	0.3%	$ 0.016	$ 13	0.4%
C	**State Intergov. Revenue Total**	**$ 3.818**	**$ 1,366**	**26.0%**	**$ 0.954**	**$ 777**	**21.8%**
C21	Education	$ 2.696	$ 965	18.3%	$ 0.475	$ 387	10.8%
C30	General Local Support	$ 0.031	$ 11	0.2%	$ 0.079	$ 64	1.8%
C42	Health and Hospitals	$ 0.165	$ 59	1.1%	$ 0.076	$ 62	1.7%
C46	Highways	$ 0.034	$ 12	0.2%	$ 0.014	$ 11	0.3%
C50	Housing and Community Development	$ 0.002	$ 1	0.0%	$ 0.003	$ 3	0.1%
C79	Public Welfare	$ 0.606	$ 217	4.1%	$ 0.130	$ 106	3.0%
C89	All Other	$ 0.281	$ 101	1.9%	$ 0.169	$ 137	3.8%
C93	Gas Supply Utility				$ 0.000	$ 0	0.0%
C94	Public Mass Transit Utility	$ 0.001	$ 0	0.0%	$ 0.007	$ 6	0.2%

TABLE 7B - Page 2 of 2									
D	**Local Intergov. Revenue Total**	**$ 0.222**	**$ 80**	**1.5%**	**$ 0.028**	**$ 23**	**0.6%**
D11	Interschool System Revenue	$ 0.080	$ 28	0.5%	$ -	$ -	0.0%
D21	Education	$ 0.012	$ 4	0.1%	$ -	$ -	0.0%
D30	General Local Support	$ 0.043	$ 15	0.3%	$ 0.005	$ 4	0.1%
D42	Health and Hospitals	$ 0.000	$ 0	0.0%	$ 0.004	$ 4	0.1%
D46	Highways	$ 0.004	$ 1	0.0%	$ -	$ -	0.0%
D79	Public Welfare				$ 0.008	$ 6	0.2%
D80	Sewerage	$ 0.004	$ 1	0.0%	$ -	$ -	0.0%
D89	All Other	$ 0.080	$ 29	0.5%	$ 0.010	$ 8	0.2%
T	**Tax Revenue Total**	**$ 8.609**	**$ 3,081**	**58.6%**	**$ 2.465**	**$ 2,006**	**56.2%**
T01	Property Tax	$ 6.768	$ 2,422	46.1%	$ 1.915	$ 1,559	43.7%
T09	General Sales and Gross Receipts Taxes	$ 1.598	$ 572	10.9%	$ 0.184	$ 150	4.2%
T15	Public Utilities	$ 0.036	$ 13	0.2%	$ 0.105	$ 85	2.4%
T16	Tobacco Products				$ 0.006	$ 5	0.1%
T19	Other Selective Sales & Gross Receipts Tax	$ 0.013	$ 5	0.1%	$ 0.019	$ 16	0.4%
T24	Motor Vehicles	$ 0.007	$ 2	0.0%	$ 0.024	$ 20	0.6%
T99	Taxes, NEC	$ 0.187	$ 67	1.3%	$ 0.212	$ 173	4.8%
U	**Miscellaneous Revenue**	**$ 0.587**	**$ 210**	**4.0%**	**$ 0.263**	**$ 214**	**6.0%**
U01	Special Assessments	$ 0.011	$ 4	0.1%	$ 0.006	$ 5	0.1%
U11	Sales - Other	$ 0.006	$ 2	0.0%	$ 0.020	$ 17	0.5%
U20	Interest Earnings	$ 0.275	$ 98	1.9%	$ 0.143	$ 116	3.3%
U30	Fines and Forfeits	$ 0.022	$ 8	0.2%	$ -	$ -	0.0%
U40	Rents	$ 0.001	$ 1	0.0%	$ 0.002	$ 1	0.0%
U99	Miscellaneous General Revenue, NEC	$ 0.272	$ 97	1.8%	$ 0.092	$ 75	2.1%
X1-8	**Public Employee Ret. System Total**				**$ 0.035**	**$ 29**	**0.8%**
X01	Employee Contributions from Local Gov.				$ 0.058	$ 47	1.3%
X04	Local Gov. Contributions				$ 0.096	$ 78	2.2%
X05	Other Gov. Contributions				$ 0.000	$ 0	0.0%
X08	Non-Federal Earnings on Investment				$ (0.119)	$ (97)	-2.7%

Source: 2002 Census of Governments, 2002 population estimates from ACS

TABLES 7A and 7B demonstrate that there are interesting and important differences in the sources of revenues for local governments in the two regions. Five differences which stand out are:

- Local government revenues in LI exceeded comparable revenues in NVA by $1,689 per capita, or 45% - which is consistent with the differences in expenditures between the two regions,

- Revenues from New York State funded 26% of Long Island local government costs, whereas the Commonwealth of Virginia funded substantially less – 21.8% of metro Northern Virginia's costs. New York State's education funding represented 18.3% of the total funding received by local governments on Long Island, whereas Virginia's education funding equaled 10.8% of the total,

- The property tax represented 46.1% of revenues for Long Island governments, compared with 43.7% of metro Northern Virginia governments. While the percentages were approximately equal, the per capita property tax burden on Long Island was $2,422, or $863 (55.3%) higher per capita than the metro Northern Virginia property tax burden of $1,559,

- Sales and Gross Receipts taxes provided 10.9% of revenues in Long Island, and only 4.2% in metro Northern Virginia. However, metro Northern Virginia offset that difference by collecting substantially higher percentages of Other Local Tax Revenues and Miscellaneous Revenues.

- Despite the differences in the *components* of local taxes, the overall *percentage* of revenues coming from local taxes was similar between the two regions (58.6% for LI compared to 56.2% for NVA.)

Another way to describe the differences between LI and NVA is shown in TABLES 8A and 8B. These tables list the sources of revenues in each region, sorted from high to low, for every source of revenue that provides at least 1% of total revenue. For Long Island, the three highest sources of revenues represent 75.3% of all revenues. Two of the three highest – Property tax and General Sales and Gross Receipts Taxes, were local taxes, with the Education revenues being provided from the state. For NVA, the three highest sources of revenue only represented 59.3% of all revenues. Like LI, two of the three highest taxes – Property tax and Taxes, NEC[12] – were local taxes, with Education revenues being provided from the state.

TABLE 8A
Revenue Sources for LI - 1% or More of Total LI Revenue

		LI		
	Description of Source	Total $	$ per Capita	% of Total
	GRAND TOTAL	**$ 14.695**	**$ 5,259**	**100.0%**
T01	Property Tax	$ 6.768	$ 2,422	46.1%
C21	Education	$ 2.696	$ 965	18.3%
T09	General Sales and Gross Receipts Taxes	$ 1.598	$ 572	10.9%
C79	Public Welfare	$ 0.606	$ 217	4.1%
A89	All Other	$ 0.283	$ 101	1.9%
C89	All Other	$ 0.281	$ 101	1.9%
U20	Interest Earnings	$ 0.275	$ 98	1.9%
U99	Miscellaneous General Revenue, NEC	$ 0.272	$ 97	1.8%
A91	Water Supply	$ 0.218	$ 78	1.5%
A36	School Tuition	$ 0.212	$ 76	1.4%
T99	Taxes, NEC	$ 0.187	$ 67	1.3%
A81	Solid Waste Management	$ 0.183	$ 66	1.2%
C42	Health and Hospitals	$ 0.165	$ 59	1.1%
	All Other	$ 0.950	$ 340	6.5%

Source: Table 7B

[12] NEC is defined as "Taxes not listed separately or provided for in categories above, such as taxes on land at a specified rate per acre (rather than on assessed value)." Link: http://www.census.gov/govs/www/class_ch7_tax.html#t99

TABLE 8B Revenue Sources for NVA - 1% or More of Total NVA Revenue				
		NVA		
	Description of Source	$ in Billions	$ per Capita	% of Total
	GRAND TOTAL	**$ 4.386**	**$ 3,570**	**100.0%**
T01	Property Tax	$ 1.915	$ 1,559	43.7%
C21	Education	$ 0.475	$ 387	10.8%
T99	Taxes, NEC	$ 0.212	$ 173	4.8%
T09	General Sales and Gross Receipts Taxes	$ 0.184	$ 150	4.2%
C89	All Other	$ 0.169	$ 137	3.8%
U20	Interest Earnings	$ 0.143	$ 116	3.3%
A91	Water Supply	$ 0.142	$ 116	3.2%
A80	Sewerage	$ 0.138	$ 113	3.2%
C79	Public Welfare	$ 0.130	$ 106	3.0%
T15	Public Utilities	$ 0.105	$ 85	2.4%
X04	Local Gov. Contributions	$ 0.096	$ 78	2.2%
U99	Miscellaneous General Revenue, NEC	$ 0.092	$ 75	2.1%
A81	Solid Waste Management	$ 0.083	$ 68	1.9%
C30	General Local Support	$ 0.079	$ 64	1.8%
C42	Health and Hospitals	$ 0.076	$ 62	1.7%
X01	Employee Contributions from Local Gov.	$ 0.058	$ 47	1.3%
A09	School Lunch	$ 0.052	$ 42	1.2%
A89	All Other	$ 0.051	$ 42	1.2%
A61	Parks and Recreation	$ 0.050	$ 41	1.1%
B50	Housing and Community Development	$ 0.044	$ 36	1.0%
	All Other	$ 0.089	$ 72	2.0%

Source: Table 7B

In summary, total revenues collected by Long Island governments exceeded metro Northern Virginia by $1,689 per capita. 63.6% of the differential came from higher taxes imposed directly on local taxpayers – local taxes were $1,075 higher per capita on LI, of which $863 were direct property taxes. Other differences are summarized in TABLE 7A, which shows that the largest share of the remaining difference between LI and NVA was that New York state provided $589 (75.8%) per capita more to LI than Virginia provided to NVA.

Another interesting difference between the regions is that 20 different sources provided at least 1% of the revenues for NVA, compared to 13 different sources for LI. This suggests that local governments in NVA have developed a broader tax revenue base than local governments in LI. While the census data only permits a high level comparison between the regions, this analysis suggests that LI governments could study NVA in more detail to identify potential opportunities to diversify sources of revenues.

Differences Between the Regions

CGR's analysis of the 2002 Census of Governments data shows that there are clear differences between the regions in terms of both the expenses (cost) of local governments and the sources of revenues for those local governments that supported the level of expenses reported. The census data, however, only provide sufficient information to describe "what" differences exist, but not "why". For example, are costs on Long Island higher because more services are provided by local governments, or because the quality of services provided on Long Island is higher (which might justify a higher cost structure)? Much more work will be required to explain and conclusively prove any cause and effect relationships between level of services and cost of services when comparing local government services at a regional level across states. CGR will begin to address these questions in examining two functional areas in more detail in Sections 2 and 3 below. However, for the overall comparison of the regions undertaken in this section, our research has found that the cost differences are likely explained by a complex combination of factors. Our review of the regions suggest that the following elements are likely to be some of the more significant explanations the cost differences identified above, however, we caution that this list is neither definitive nor complete.

1. Total number of local government employees.

One straightforward explanation for the cost difference between the regions might be the total number of local government employees. TABLE 9 shows that, LI did have 13.2% more local government employees in 2002 than NVA. However, as noted previously, total salary costs in LI exceeded those in NVA by 82.5%. Thus, it appears that employee cost differences between the regions were caused by a combination of more employees in LI local governments and higher wages paid to those employees.

TABLE 9
Total FTE in Local Government, 2002

	# FTE's Total	FTE's per Capita
Nassau	60,968	
Suffolk	58,648	
TOTAL LI	***119,616***	***0.043***
Fairfax	37,294	
Loudoun	8,168	
Fairfax City	359	
Falls Church City	366	
TOTAL NVA	***46,187***	***0.038***

Source: U.S. Census Bureau, Governments Division
http://www.census.gov/govs/www/apesloc02.html
2002 ACH population estimates

2. Differences in local government employer/employee contracts.

In New York, the Taylor Law requires that if an employee union exists in a local governmental, that local government must bargain in good faith with that union as the representative of all employees covered by the employees' bargaining unit. In short, employee unions in New York cover all employees (as an "agency shop"), and local governments are bound to honor the terms and conditions set in contracts arrived at through the collective bargaining process. Virginia, on the other hand, is one of 22 states that are characterized as "right-to-work" states, and as such, is not subject to the same collective bargaining requirements as New York. In fact, the employee unions in NVA are effectively associations. Public

employees are not required to belong to these associations and local governments are not required to bargain with the associations. In Virginia, the governing boards of each government can and do set their own terms and conditions of employment. Employees are not covered by multi-year collective bargaining agreements. CGR concludes that although we are not able to determine the extent to which the costs of local government employees is affected by this difference between LI and NVA, we believe that this is likely to play a major role in explaining differences in the cost structure between the two regions.

3. Underlying regional cost differences.

CGR reviewed a wide range of data[13] to attempt to determine whether or not underlying cost differences between the regions might account for some of the difference in cost of local governments. However, our review found that there is a substantial discrepancy among various sources claiming to identify differences in the cost-of-living between the two regions. We were unable to find what we believe to be a valid and comprehensive comparison that conclusively demonstrated what, if any, overall cost-of-living difference exists between the regions.

4. Demand for service differences.

Demand for local government services can be attributed to many different factors, including, but not limited to service expectations by citizens and businesses, socio-demographic differences among the populations being served by the different governments, the economy in a region (translated into "ability to pay") and variations in service requirements caused by larger regional variations such as geography, climate, and infrastructure development. Demographic and economic differences between the regions were developed for the *Index* by other research teams, and shared with CGR. From this, we conclude that there are both similarities and differences between the regions, but it is not possible, at the regional level of detail provided, to state definitively the extent to which any one of the similarities or differences explain the differences in the cost of local government shown in the 2002 census data.

5. Differences in the relationship of the state to local governments.

In conducting the research for this project, CGR found that there are several differences in the relationship between each state and local government that can explain some of the cost and revenue differences identified in the 2002 census data. The subsection "Local Government Units" above describes differences in how local governments evolved in the two regions. CGR has identified three ways that those differences have resulted in cost and revenue differences that are reflected in the census data. The specific cost differences are reviewed in the discussion about TABLES 6A and 6B above. However, more background is provided below.

The first difference is that all major roads in Virginia are the responsibility of, and funded by, the Virginia Department of Transportation. In New York, the state assumes responsibility for constructing and maintaining the state road system, and it does so either with its own staff of state employees, or through contracts with local governments. Only 6% of the roads on Long Island are designated state roads, thus, local governments are responsible for some or all of the costs for 94% of the roads on Long Island[14]. In Virginia, primary public roads are owned and maintained by the Commonwealth. Local governments assume responsibility for secondary roads (other than those built by and for developments that are the

[13] For example, 2005 ACS Per Capita, Household and Family income figures show NVA higher than LI, the CNN Cost of Living Comparison (www.ccnmoney.com) indicates the cost of living in Nassau is 6% higher than Washington D.C., and the Cost of Living Wizard (swz.salary.com) indicates that the cost of living in Nassau is 22% lower than Washington D.C.

[14] New York State Statistical Yearbook , 2005

responsibility of property owner associations). As a result, local governments in metro Northern Virginia do not have the same cost burden for building and maintaining roads and the associated DPW costs as their counterparts in Long Island. CGR was not able to develop a definitive estimate of the per capita impact of this difference in the costs between LI and NVA. On the other hand, local governments in metro Northern Virginia do not have the same type of control over building and upgrading the road network as local governments in Long Island, which some believe to be one of the contributing factors to the major traffic problems facing metro Northern Virginia. In fact, the two counties in NVA have begun to develop their own bonding programs to create local funding to support infrastructure improvements over-and-above what the state is willing to support. Over time, this will have the effect of showing a shift toward more local funding for roads in NVA.

A second difference is that a portion of Medicaid costs are mandated to be paid by county governments in New York, whereas Virginia does not require county governments to pay Medicaid costs. New York counties pay an average of approximately 16% - 18% of the total cost of Medicaid recipients in each county, which is clearly a tax burden on local county residents that does not exist in Virginia.

A third difference is that local governments in New York (counties) provide financial support for both local community hospitals and local community colleges, whereas Virginia hospital and community college systems receive public sector funding from the state and do not require a local funding component.

6. Local Homeowner associations.

In discussions with officials from NVA, CGR found that another factor that helps explain the cost difference between LI and NVA is the role of homeowner associations in NVA. Outside of incorporated towns and cities in Virginia, planned housing developments are run by property owner associations. Property owner associations, which are prescribed by Commonwealth law, require property owners to share in the cost of commonly held property within the borders of the association, such as swimming pools, recreation centers, tennis courts, storm water retention ponds and roads and associated utilities built as part of the development. As an example, the community of Little Rocky Run is a planned community of 2,700 homes in Fairfax County. Property owners are assessed fees ranging from $600 to $800 per year to pay for the three recreation centers, three pools, three multi-purpose courts, seven tennis courts, sixteen tot lots and three miles of walking trails, all of which are managed by a full-time staff of five and with an annual budget of $1.9 million. Property owner associations range in size from two houses sharing costs for a common drainage ditch to the well-known planned community in Fairfax County called Reston, which includes more than 56,000 residents. While no definitive number exists that quantifies the total number of properties within property owner association boundaries, they are very pervasive in metro Northern Virginia, thus, a substantial number of properties are subject to property owner association fees.

It is important to factor property owner associations into the comparison of local government costs between the two regions, because, in Virginia, property owner associations provide many of the services provided by local governments in New York, e.g. recreation facilities, roads, sewers, water, refuse collection, etc., but in Virginia these costs are not paid as taxes to a local government. However, given that property owners within the associations must pay the fees as part of their cost of owning property, property owner association fees are like taxes. For this study, CGR was unable to develop a conclusive assessment of the additional cost of homeowner's associations on a per capita basis in NVA, however, it is certain that at least a small portion of the difference in costs between LI and NVA should be attributed to the fact that many homeowners in NVA are subject to additional costs that are already included in the cost of local government totals for LI.

Implications for Long Island

CGR compared the local governance models of Long Island and metro Northern Virginia in order to identify what differences exist between the two regions. Based on the findings described above, on a comparative basis, the cost of local government on Long Island was higher by $1,722 per capita than in a comparable region in metro Northern Virginia. The major differences, sorted by area of expense, are summarized in TABLE 10.

TABLE 10
Examples of Categories of Per Capita Expense Difference - Summary

Major Function of Expense	Comment	LI $ per Capita	NVA $ per Capita	Per Capita Difference	Percent of Total Difference
Public Assistance Programs	Different state requirement in Virginia	$ 345	$ 181	$ 164	9.5%
Highways	Different state requirement in Virginia	$ 147	$ 50	$ 97	5.6%
Own Hospitals	Different state requirement in Virginia	$ 120	$ -	$ 120	7.0%
Higher Education	Different state requirement in Virginia	$ 96	$ -	$ 96	5.6%
Subtotal - Costs Due to Different State Requirements		***$ 708***	***$ 231***	***$ 477***	***27.7%***
Elem. & Second. Education		$ 2,650	$ 1,816	$ 834	48.4%
Fire Protection		$ 104	$ 106	$ (2)	-0.1%
All Other Functions		$ 2,100	$ 1,687	$ 413	24.0%
TOTAL		**$ 5,562**	**$ 3,840**	**$ 1,722**	**100.0%**

Source: Table 6

The comparison of expenditures on a function-by-function basis identifies areas where Long Island clearly spends more for certain services. As shown in TABLE 10, $477 of the per capita expenditure differences (27.7% of the total difference) can be readily explained because of differences in what roles local governments play within the larger context of their respective states, where local governments in New York pay costs for highways, Medicaid, local community hospitals and community colleges that are not imposed on local governments in Virginia. However, even accounting for differences between the states, Long Island per capita costs were still $1,245 higher for areas of expenditure that were common to both regions, and in several of these areas, Long Island spent substantially more on a per capita basis.

Because so many interconnected variables affect what services are provided by local governments and how much these services cost, the data, when viewed from a regional perspective does not provide sufficient detail to determine the extent to which these cost differences can be attributed to differences in the models of governance. There are too many possible variables that affect these costs – differential demand for service, differential service expectations, differential core cost components (e.g. wages of govt. workers), older infrastructure, etc. However, a more detailed analysis of individual functional areas will begin to provide more insights into how governance structures affect cost. Thus, CGR examined in more detail some key comparisons between Long Island and metro Northern Virginia for the delivery of public education services and fire services.

Public education was selected because, as shown in TABLE 10, that area represented 48.4% of the per capita difference between LI and NVA, and because of the long standing issues raised by the *Index* and others about the substantial differences among the many districts on Long Island. Fire services were selected for this review, even though in 2002 they were slightly lower cost, on a per capita basis on LI than NVA, because the fires services on Long Island have been well documented, and because it is clear that they are facing real challenges due to the potential need to gradually shift to professional firefighters to offset the projected decline in volunteers. These comparisons follow in the next two sections.

Section 2 - Public School Systems: Different Models-Different Costs

The models for public school systems are significantly different between Long Island and metro Northern Virginia. The New York State Comptroller reported information on 127 separate school districts in Long Island (Nassau has 56 and Suffolk 71) for fiscal year 2004. The districts ranged in size from 9 students to 16,607 students[15]. Separate revenues and expenses were reported for the 127 districts, because each district runs as a separate and distinct entity, with its own boundaries for taxing purposes, administration, students, teaching philosophies, facilities expenses, costs and revenues. By contrast, students in the metro Northern Virginia (NVA) region were served by a total of three school districts, as described in Section 1 of this report.

Methodology

In order to compare the costs of the two different governance models, CGR used data available from the National Center for Educational Statistics (NCES). NCES, which is funded by the U.S. Department of Education, collects and analyzes education data from districts across the country. Information is provided directly by the districts to NCES in a standard format, using standard definitions. Thus, although the way districts report their data may result in variations in the data, in theory, the NCES process provides an internally consistent methodology for collecting data that can be used to compare districts across the country. CGR created a master table for the 127 districts in Nassau and Suffolk and the three NVA districts, using all the data available from NCES related to expenditures, revenues, students, staffing and operations, for the 2003-2004 fiscal year (the last year for which complete data sets were available). The tables provided in this report are based on the NCES data.

Cost Comparisons

TABLE S-1 shows that the 127 Long Island school districts served 474,382 students in the 2003-2004 school year, and the three metro Northern Virginia districts served 206,859 students. Total expenditures[16] totaled $8.250 billion for the Long Island districts, and $2.487 billion for metro Northern Virginia. Comparing expenditures per pupil, and expenditures per capita (for the total population of the two regions) shows that the average expenditure per pupil on Long Island was $5,369 higher (45% higher) and average expenditure per capita was $1,061 higher (55% higher) than in metro Northern Virginia. TABLE S-1 also shows that in Long Island, districts spent from $9,994 per student to $92,571[17] per student, compared to the range among the three metro Northern Virginia districts of $11,494 to $14,735.

[15] 2003-2004 figures from the National Center for Education Statistics (NCES).

[16] Total Expenditures as defined by NCES includes expenditures made by school districts, including current expenditures for public elementary and secondary education, and expenditures for facilities acquisition and construction, replacement equipment, other programs and interest on debt. Transfer payments to other school systems are not included in this total. Transfer payments to state and local governments are included in this total.

[17] The highest cost per capita district was a small district with 14 students.

TABLE S-1 District and Expenditure Comparisons - 2004						
	Number of Districts Included	Number of Students (Pupils)	Total Expenditures	Expenditure per Pupil*	Total Population**	Expenditure per Capita
Nassau	56	211,473	$3,801,533,000	$17,976	1,310,076	$2,902
Suffolk	71	262,909	$4,448,976,000	$16,922	1,444,642	$3,080
LI Composite	***127***	***474,382***	***$8,250,509,000***	***$17,392***	***2,754,718***	***$2,995***
LI Range				***$9,994 to $92,571***		
Fairfax County	1	164,235	$1,887,675,000	$11,494	1,020,653	$1,849
Falls Church City	1	1,874	$27,614,000	$14,735	10,781	$2,561
Loudoun County	1	40,750	$571,864,000	$14,033	254,612	$2,246
NVA Composite	***3***	***206,859***	***$2,487,153,000***	***$12,023***	***1,286,046***	***$1,934***

Source - NCES 2003-2004 Data

** Average for all districts in each county*

*** Based on 2005 ACS population estimates, as 2004 not available for all entities. Fairfax City pop. added to Fairfax County*

In addition to identifying the significant per student and per capita average expenditure differences between the two regions, TABLE S-1 shows the extremely wide range of expenditures per pupil across Long Island. Among the three districts in NVA, the highest expenditure district spent 22% more per pupil than the lowest district. In Long Island, the highest expenditure school district spent 826% more per pupil than the lowest district. As noted in footnote 4, the highest cost district was a tiny district with only 14 students. However, in order to not let extreme cases bias the findings, CGR reviewed the data in more detail to understand the range of sizes and expenditures per pupil found on Long Island. CGR divided the 127 districts into quartiles, by number of students, and developed comparative statistics for districts in each quartile, compared these to the districts in NVA. The results are shown in TABLE S-2A and TABLE S-2B.

TABLE S-2A shows the number of students in the quartile with the 32 smallest school districts. The number of students in these districts range from 9 students to 1,502, with the calculated average district size being 662 students. The total of expenditures for the 32 smallest districts was $448 million. The 32 smallest districts served 21,192 students, which represented just 4% of the total number of students on LI, and the districts represented 5% of the total expenditures on LI. However, the 32 smallest districts also had the highest expenditure per pupil on LI.

At the other extreme, the 31 districts with the highest number of students ranged in size from 5,408 students to 16,607, with a calculated average district size of 7,802 students. The 31 largest districts served 249,666 students, which represented 53% of the total students on LI, and those districts had 51% of total expenditures. The 31 largest districts had the lowest average expenditure per pupil.

TABLE S-2 A LI Districts Divided into Quartiles - Size and Expense - Compared to NVA								
	# Districts Included	Avg Students per District	Student Size Range	Total # Students	Share of Total Students	Total Expenditures	Share of Total Expenditure	Expenditure per Pupil
1st Quartile	32	662	9-1,502	21,192	4%	$ 448,905,000	5%	$ 21,183
2nd Quartile	32	2,278	1,563-3,083	72,898	15%	$ 1,327,367,000	16%	$ 18,209
3rd Quartile	32	4,082	3,141-5,266	130,626	28%	$ 2,281,707,000	28%	$ 17,467
4th Quartile	31	7,802	5,408-16,607	249,666	53%	$ 4,192,530,000	51%	$ 16,793
Total LI	***127***	***3,735***	***9-16,607***	***474,382***	***100%***	***$ 8,250,509,000***	***100%***	***$ 17,392***
Loudoun	1	40,750	-	40,750	20%	$ 571,864,000	23%	$ 14,033
Falls Church	1	1,874	-	1,874	1%	$ 27,614,000	1%	$ 14,735
Fairfax	1	164,235	-	164,235	79%	$ 1,887,675,000	76%	$ 11,494
Total NVA	***3***	***68,953***	***1,874-164,235***	***206,859***	***100%***	***$ 2,487,153,000***	***100%***	***$ 12,023***

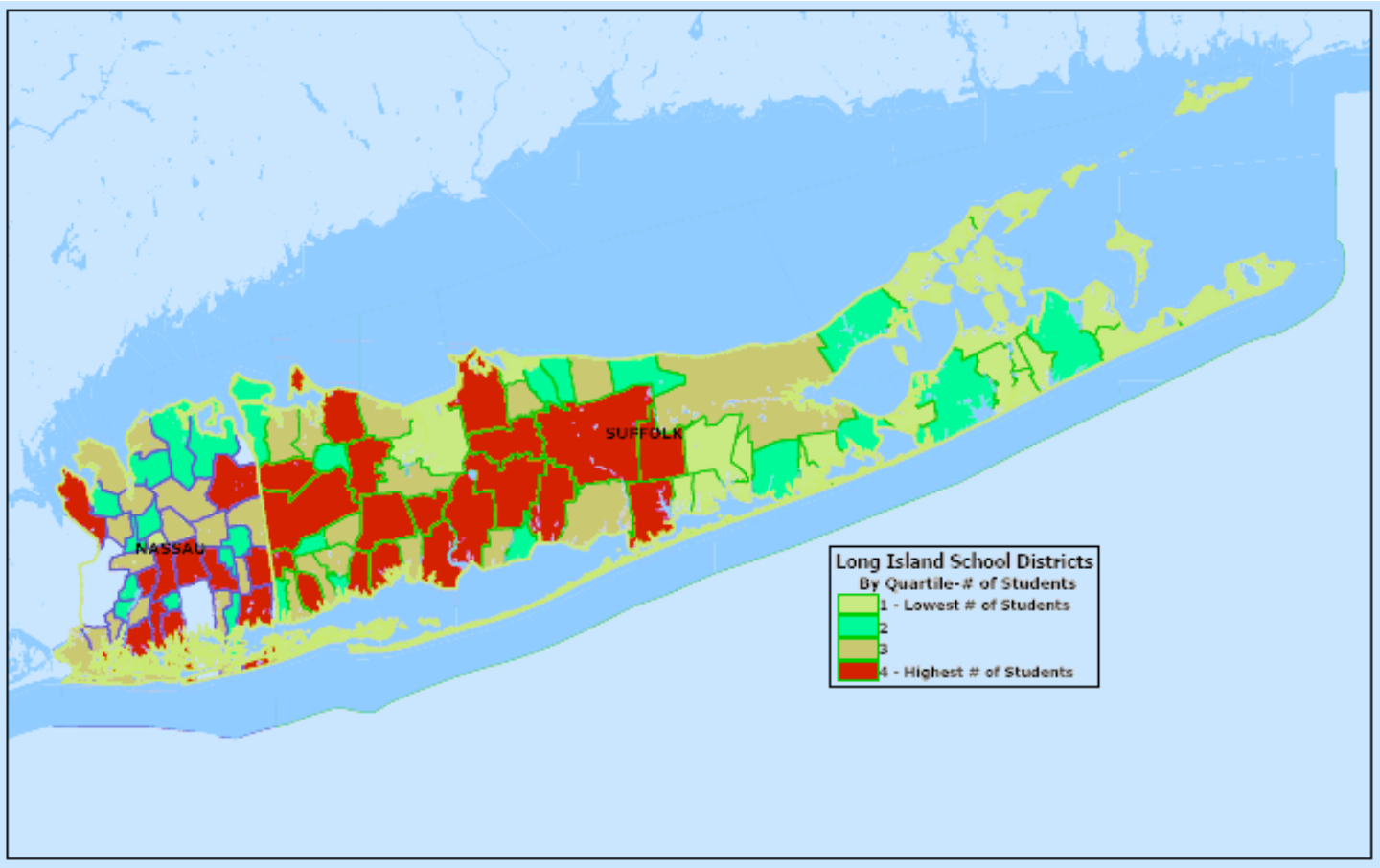
Source - NCES 2003-2004 Data

TABLE S-2A clearly demonstrates that, in the absence of any other considerations, size matters - the bigger the district, the lower the per pupil expenditure. In every case at the aggregate levels shown in TABLE S-2A, the larger the district, the lower the cost per pupil. This finding is consistent with academic studies of New York schools[18] and other research, which suggest that districts in the range of 3,500 to 6,500 students are most cost effective, although there is some evidence that above that level, some costs continue to decrease because of economies of scale while other costs begin to increase because of the need to provide more public school services. While the calculated average size in the top quartile – 7,802 – is somewhat above the range found to be most cost effective in the two studies referenced, it is still clear that the 31 largest districts had a 21% lower cost structure, on average, than the 32 smallest districts on Long Island. Expenditures per pupil were also lower in NVA as district size increased. Perhaps the most striking finding in TABLE S-2A was the number of very small school districts on Long Island. One quarter of all the districts had 1,500 students or less, with an average size of 662 students – well below the efficiency threshold identified in the studies referenced in footnote 16.

MAP 3 provides a reference for seeing the distribution of districts, by quartile, across Long Island.

[18] See William Duncombe, Jerry Miner, John Ruggiero, *Potential Cost Savings from School District Consolidation: A Case Study in New York*, Center for Policy Research, Syracuse University, February 1994; and William Duncombe and John Yinger, *Does School District Consolidation Cut Costs?,* Center for Policy Research, Syracuse University, October 2003.

MAP 3
Location of School Districts by Size –Divided into Quartiles Shown in TABLE S2-A



Note – Map 3 shows 115 school districts on Long Island. 12 school districts are not mapped because the data could not be matched on the GIS mapping software.

TABLES S-1 and S-2A clearly show cost differences among Long Island districts as well as between Long Island districts in the aggregate and the NVA districts, and there appears to be a strong link between size of district and cost efficiencies as measured by expenditure per pupil. However, these comparisons do not account for potentially different resource requirements needed to meet the special needs of student populations within different districts. It was beyond the scope of this study to attempt to take into account differences in student populations, each school district's response to those differences and the quality of educational services provided by each district. However, the NCES data did provide the data to derive a very useful quality indicator – the student/teacher ratio. CGR suggests that the pupil/teacher ratio is a reasonable single indicator of a school district's commitment to provide a quality educational environment for its students. The lower the student/teacher ratio, all else being equal, the more likely that students are receiving a quality educational experience.

Thus, CGR created TABLE S-2B, which shows the number of Full Time Equivalent (FTE) Teachers (as defined by NCES), along with the number of students by quartile (from TABLE S-2A), and the calculated Students per Teacher ratios.

TABLE S-2B Student/Teacher Ratios - By Quartile - Compared to NVA				
	# Districts Included	Total # Students	# FTE Teachers	Students per Teacher*
1st Quartile	32	21,192	1,769	12.0
2nd Quartile	32	72,898	5,841	12.5
3rd Quartile	32	130,626	10,072	13.0
4th Quartile	31	249,666	18,151	13.8
Total LI	***127***	***474,382***	***35,834***	***13.2***
Loudoun	1	40,750	3,016	13.5
Falls Church	1	1,874	174	10.8
Fairfax	1	164,235	12,293	13.4
Total NVA	***3***	***206,859***	***15,483***	***13.4***

Source - NCES 2003-2004 Data

** Average per quartile*

TABLE S-2B shows that the average quartile Student/Teacher ratio increased from 12.0 for the lowest student population schools to 13.8 for the highest student population schools on Long Island. Thus, the 31 largest districts had an average of 15% more students per teacher than the 32 smallest districts. However, the 32 smallest districts had, on average, 26% higher costs per pupil than the 31 largest districts. Thus, quality differences, as least as expressed in the student/teacher ratio, do not appear to explain all of the cost differences between the quartiles on Long Island. Further, differences in the student/teacher ratios most certainly *do not* explain the cost differences between Long Island and NVA, where the average student/teacher ratios between the regions are essentially equal.

Although CGR did not undertake a rigorous study to explain why the cost of the public school system in Long Island was 45% higher than the school system in NVA, we believe it is possible, within the limits of the NCES data, to identify where individual cost differences appear. To highlight these cost differences, CGR identified every major cost category available in the NCES database where a comparison could be made between Long Island and NVA, and listed them in TABLE S-3.

TABLE S-3 was derived by CGR from NCES data as follows:

- Each line indicates a discrete cost element as reported by NCES. The table presents a brief summary description, and a line number. The complete NCES definitions for each line number are provided in the Appendix to this report.
- The expenditure per student columns for LI and NVA (columns 2 and 3) were derived by CGR from the total expenditure and total student data reported by NCES.
- The Difference LI-NVA (column 4) shows how much higher or lower the Long Island costs were per student,
- The Percent Difference (column 5) shows how much higher or lower the Long Island costs were compared to NVA, expressed as a percent,
- The Difference as a Percent of Total Expenditures (column 6) shows how much of the Total Expenditures Difference ($5,369) was explained by the individual type of expense, for each row. It is important to understand that the rows are *not* cumulative. Each row expense item is a discrete expense as defined by NCES, and each expense has different components. For example, Instructional Expenditures – Salary (row 18) and Instructional Expenditures – Benefits (row 33) are included in, but are not all of the Instructional – Total Current Expenditures (row 3).

TABLE S-3
Expenditure per Student -
Comparing LI to NVA by Type of Expenditure

Note - Individual line items are independent of each other, and do not sum to Total Expenditures.
Many NCES categories have some overlap.

Type of Expenditure by NCES Category	Row #	Long Island	Northern Virginia	Difference LI - NVA	% Difference - LI Higher/Lower than NVA	Difference as % of Total Expenditures
Column Number		1	2	3	4	5
TOTAL EXPENDITURES	1	***$17,392***	***$12,023***	***$5,369***	***45%***	
CAP. OUTLAY- TOT. EXPEND.	2	$1,705	$1,475	$230	16%	4%
INSTRUCT.- TOT. CURR EXPEND	3	$9,938	$6,197	$3,741	60%	70%
SUPP SERV- TOT CURR. EXPEND	4	$4,930	$3,518	$1,412	40%	26%
OTHER- EL-SEC TOT. CURR. EXPEND	5	$237	$423	-$186	-44%	-3%
NON EL-SEC- TOT CURR EXPEND	6	$119	$76	$42	55%	1%
EL-SEC EDUC.- TOT CURR EXP.	7	$15,105	$10,138	$4,967	49%	93%
SUPP SERV- TOTAL- STUDENTS	8	$708	$562	$146	26%	3%
SUPP SERV- TOTAL- INSTRUCT.	9	$531	$623	-$93	-15%	-2%
SUPP SERV- TOTAL- GEN ADMIN	10	$343	$82	$262	321%	5%
SUPP SERV- TOTAL- SCH ADM	11	$731	$607	$124	20%	2%
SUPP SERV- TOTAL- OPS/MAINT	12	$1,361	$977	$384	39%	7%
SUPP. SERV.- TOTAL- STUDENT TRANSP	13	$889	$523	$366	70%	7%
SUPP. SERV.- TOTAL- OTHER	14	$367	$144	$222	154%	4%
NON-INSTR.- FOOD SERVICES	15	$237	$420	-$183	-44%	-3%
CURR SPEND- PUB. CHART. SCH	16	$14	$0	$14		0%
TOTAL CURR. EXPEND.- SALARY	17	$9,898	$7,048	$2,850	40%	53%
INSTRUCT. EXPEND.- SALARY	18	$7,187	$4,609	$2,578	56%	48%
SUPP SERV- SALARY- STUDENTS	19	$510	$446	$64	14%	1%
SUPP SER- SAL.- INSTR STAFF	20	$321	$392	-$71	-18%	-1%
SUPP. SERV- SALARY- GEN ADM	21	$126	$53	$73	138%	1%
SUPP. SERV- SALARY- SCH ADM	22	$547	$477	$70	15%	1%
SUPP SER- SAL.- OPS & MAINT	23	$691	$432	$259	60%	5%
SUPP SER- SAL.- STUD. TRANS	24	$152	$288	-$135	-47%	-3%
SUPP SERV- SALARY- OTH SUPP	25	$200	$92	$108	118%	2%
NON-INST- SALARY- FOOD SERV	26	$75	$163	-$88	-54%	-2%
TOTAL CURR. EXP.- BENEFITS	27	$2,778	$1,834	$944	51%	18%
TEACHER SAL- REG ED PROGS	28	$4,811	$2,834	$1,977	70%	37%
TEACHER SAL- SPEC ED PROGS	29	$925	$1,053	-$128	-12%	-2%
TEACHER SAL- VOC ED PROGS	30	$54	$150	-$96	-64%	-2%
TEACHER SAL- OTH ED PROGS	31	$145	$45	$100	223%	2%
TEXTBOOKS FOR INSTRUCTION	32	$96	$101	-$5	-5%	0%
INSTRUCT EXP.- BENEFITS	33	$2,044	$1,194	$850	71%	16%
SUPP SERV- BENEF.- STUDENTS	34	$143	$111	$32	29%	1%
SUPP SERV- BENEF.- INSTRUT.	35	$85	$100	-$15	-15%	0%
SUPP SERV- BENEF.- GEN ADM	36	$39	$14	$25	180%	0%
SUPP SERV- BENEF.- SCH ADM	37	$154	$124	$30	24%	1%
SUPP SERV- BENE.- OPS/MAIN	38	$196	$109	$86	79%	2%
SUPP SERV- BENE.- TRANSP.	39	$45	$71	-$26	-37%	0%
SUPP. SERV- BENEFITS- OTHER	40	$56	$27	$28	103%	1%
NON-INSTR- BENE.- FOOD SERV	41	$16	$59	-$44	-74%	-1%
NON EL-SEC- COMM. SERV.	42	$27	$3	$24	811%	0%
NON EL-SEC- ADULT EDUCATION	43	$92	$74	$18	25%	0%
CAP. OUTLAY- CONSTRUCTION	44	$1,471	$760	$711	94%	13%
CAP. OUTLAY- INSTR. EQUIP.	45	$87	$46	$41	88%	1%
CAP. OUTLAY- OTH. EQUIPMENT	46	$100	$67	$33	49%	1%
CAP OUT.- LAND & EXISTG STRUCT.	47	$46	$601	-$555	-92%	-10%
PAYMENTS TO OTHER SCHOOL SYSTEMS	48	$162	$7	$155	2311%	3%
INTEREST ON SCH. SYS. INDEBTEDNESS	49	$302	$328	-$26	-8%	0%
CURRENT SPENDING- PRIVATE SCHOOLS	50	$113	$0	$113		2%
LT-DEBT- OUTSTANDING BEGIN. FY	51	$5,318	$7,126	-$1,808	-25%	-34%

Source - NCES 2003-2004 Data

Further study of the individual cost components would make it is possible to identify whether the differences observed in 2003-2004 were caused by, and would continue to be caused by scale or other efficiencies due to differences in the two models (i.e. the multi-district model in Long Island or the consolidated county district model in NVA), or some other variables that make Long Island different than NVA. As noted in Section 1 of this report, CGR's review of cost-of-living comparisons from available sources are inconsistent, and in the absence of more reliable information we are unable to state whether or not the cost of living in LI is measurably higher than NVA. Some of the cost differential for schools might be explained by specific regional cost differences, and the table shows some costs, such as spending on charter schools and private schools that Long Island districts have to pay due to New York State requirements. However, these are small variances compared to some of the major cost differences identified in TABLE S-3.

While TABLE S-3 shows expenditures sorted by NCES expenditure category, TABLE S-4 shows the same information sorted by the last column – the Difference as a Percent of the Total Difference. The top rows in TABLE S-4 show those expenditures that explain the highest amount of the difference in costs between LI and NVA. For example, the difference between LI and NVA Current Expenditures in Elementary and Secondary Education was $4,967, which explained 93% of the total difference of $5,369 between LI and NVA. As noted above, the rows in TABLE S-4 are *not* cumulative – they must be read independently.

TABLE S-4
Expenditure per Student -
Comparing LI to NVA by Type of Expenditure Sorted by Column 5

Note - Individual line items are independent of each other, and do not sum to Total Expenditures.
Many NCES categories have some overlap.

Type of Expenditure by NCES Category	Long Island	Northern Virginia	Difference LI - NVA	% Difference - LI Higher/Lower than NVA	Difference as % of Total Expenditures
Column Number	1	2	3	4	5
TOTAL EXPENDITURES	***$17,392***	***$12,023***	***$5,369***	***45%***	
EL-SEC EDUC.- TOT CURR EXP.	$15,105	$10,138	$4,967	49%	93%
INSTRUCT.- TOT. CURR EXPEND	$9,938	$6,197	$3,741	60%	70%
TOTAL CURR. EXPEND.- SALARY	$9,898	$7,048	$2,850	40%	53%
INSTRUCT. EXPEND.- SALARY	$7,187	$4,609	$2,578	56%	48%
TEACHER SAL- REG ED PROGS	$4,811	$2,834	$1,977	70%	37%
SUPP SERV- TOT CURR. EXPEND	$4,930	$3,518	$1,412	40%	26%
TOTAL CURR. EXP.- BENEFITS	$2,778	$1,834	$944	51%	18%
INSTRUCT EXP.- BENEFITS	$2,044	$1,194	$850	71%	16%
CAP. OUTLAY- CONSTRUCTION	$1,471	$760	$711	94%	13%
SUPP SERV- TOTAL- OPS/MAINT	$1,361	$977	$384	39%	7%
SUPP. SERV.- TOTAL- STUDENT TRANSP	$889	$523	$366	70%	7%
SUPP SERV- TOTAL- GEN ADMIN	$343	$82	$262	321%	5%
SUPP SER- SAL.- OPS & MAINT	$691	$432	$259	60%	5%
CAP. OUTLAY- TOT. EXPEND.	$1,705	$1,475	$230	16%	4%
SUPP. SERV.- TOTAL- OTHER	$367	$144	$222	154%	4%
PAYMENTS TO OTHER SCHOOL SYSTEMS	$162	$7	$155	2311%	3%
SUPP SERV- TOTAL- STUDENTS	$708	$562	$146	26%	3%
SUPP SERV- TOTAL- SCH ADM	$731	$607	$124	20%	2%
CURRENT SPENDING- PRIVATE SCHOOLS	$113	$0	$113		2%
SUPP SERV- SALARY- OTH SUPP	$200	$92	$108	118%	2%
TEACHER SAL- OTH ED PROGS	$145	$45	$100	223%	2%
SUPP SERV- BENE.- OPS/MAIN	$196	$109	$86	79%	2%
SUPP. SERV- SALARY- GEN ADM	$126	$53	$73	138%	1%
SUPP. SERV- SALARY- SCH ADM	$547	$477	$70	15%	1%
SUPP SERV- SALARY- STUDENTS	$510	$446	$64	14%	1%
NON EL-SEC- TOT CURR EXPEND	$119	$76	$42	55%	1%
CAP. OUTLAY- INSTR. EQUIP.	$87	$46	$41	88%	1%
CAP. OUTLAY- OTH. EQUIPMENT	$100	$67	$33	49%	1%
SUPP SERV- BENEF.- STUDENTS	$143	$111	$32	29%	1%
SUPP SERV- BENEF.- SCH ADM	$154	$124	$30	24%	1%
SUPP. SERV- BENEFITS- OTHER	$56	$27	$28	103%	1%
SUPP SERV- BENEF.- GEN ADM	$39	$14	$25	180%	0%
NON EL-SEC- COMM. SERV.	$27	$3	$24	811%	0%
NON EL-SEC- ADULT EDUCATION	$92	$74	$18	25%	0%
CURR SPEND- PUB. CHART. SCH	$14	$0	$14		0%
TEXTBOOKS FOR INSTRUCTION	$96	$101	-$5	-5%	0%
SUPP SERV- BENEF.- INSTRUT.	$85	$100	-$15	-15%	0%
INTEREST ON SCH. SYS. INDEBTEDNESS	$302	$328	-$26	-8%	0%
SUPP SERV- BENE.- TRANSP.	$45	$71	-$26	-37%	0%
NON-INSTR- BENE.- FOOD SERV	$16	$59	-$44	-74%	-1%
SUPP SER- SAL.- INSTR STAFF	$321	$392	-$71	-18%	-1%
NON-INST- SALARY- FOOD SERV	$75	$163	-$88	-54%	-2%
SUPP SERV- TOTAL- INSTRUCT.	$531	$623	-$93	-15%	-2%
TEACHER SAL- VOC ED PROGS	$54	$150	-$96	-64%	-2%
TEACHER SAL- SPEC ED PROGS	$925	$1,053	-$128	-12%	-2%
SUPP SER- SAL.- STUD. TRANS	$152	$288	-$135	-47%	-3%
NON-INSTR.- FOOD SERVICES	$237	$420	-$183	-44%	-3%
OTHER- EL-SEC TOT. CURR. EXPEND	$237	$423	-$186	-44%	-3%
CAP OUT.- LAND & EXIST G STRUCT.	$46	$601	-$555	-92%	-10%
LT-DEBT- OUTSTANDING BEGIN. FY	$5,318	$7,126	-$1,808	-25%	-34%

Source - NCES 2003-2004 Data

The expenditure categories shown in TABLES S-3 and S-4 include a mix of expenditures by *function* of expense (i.e. expenditures for elementary and secondary education) and expenditures by *object* of expense (i.e. expenditures for salaries and benefits.) CGR created TABLE S-5A and TABLE S-5B from TABLE 4, to show the top ten differences between LI and NVA for both function of expense and object of expense.

TABLE S-5A

Ten Highest Cost Differences between LI and NVA - Shown as Expenditures Per Student By Function of Expense

Type of Expenditure by NCES Category	Long Island	Northern Virginia	Difference LI - NVA	% Difference - LI Higher/Lower than NVA	Difference as % of Total Expenditures
TOTAL All Expenditures	***$17,392***	***$12,023***	***$5,369***		
EL-SEC EDUC.- TOT CURR EXP.	$15,105	$10,138	$4,967	49%	93%
INSTRUCT.- TOT. CURR EXPEND	$9,938	$6,197	$3,741	60%	70%
SUPP SERV- TOT CURR. EXPEND	$4,930	$3,518	$1,412	40%	26%
SUPP SERV- TOTAL- OPS/MAINT	$1,361	$977	$384	39%	7%
SUPP. SERV.- TOTAL- STUDENT TRANSP	$889	$523	$366	70%	7%
SUPP SERV- TOTAL- GEN ADMIN	$343	$82	$262	321%	5%
SUPP. SERV.- TOTAL- OTHER	$367	$144	$222	154%	4%
SUPP SERV- TOTAL- STUDENTS	$708	$562	$146	26%	3%
SUPP SERV- TOTAL- SCH ADM	$731	$607	$124	20%	2%
SUPP SERV- TOTAL- STUDENTS	$708	$562	$146	26%	3%

Source - TABLE S-4

TABLE S5-B

Ten Highest Cost Differences between LI and NVA - Shown as Expenditures per Student By Object of Expense

Type of Expenditure by NCES Category	Long Island	Northern Virginia	Difference LI - NVA	% Difference - LI Higher/Lower than NVA	Difference as % of Total Expenditures
TOTAL All Expenditures	***$17,392***	***$12,023***	***$5,369***		
TOTAL CURR. EXPEND.- SALARY	$9,898	$7,048	$2,850	40%	53%
INSTRUCT. EXPEND.- SALARY	$7,187	$4,609	$2,578	56%	48%
TEACHER SAL- REG ED PROGS	$4,811	$2,834	$1,977	70%	37%
TOTAL CURR. EXP.- BENEFITS	$2,778	$1,834	$944	51%	18%
INSTRUCT EXP.- BENEFITS	$2,044	$1,194	$850	71%	16%
CAP. OUTLAY- CONSTRUCTION	$1,471	$760	$711	94%	13%
SUPP SER- SAL.- OPS & MAINT	$691	$432	$259	60%	5%
CAP. OUTLAY- TOT. EXPEND.	$1,705	$1,475	$230	16%	4%
PAYMENTS TO OTHER SCHOOL SYSTEMS	$162	$7	$155	2311%	3%
CURRENT SPENDING- PRIVATE SCHOOLS	$113	$0	$113		2%

Source - TABLE S-4

These tables suggest a starting point for further studies into why the costs of Long Island schools are so much higher than NVA schools. Two examples will illustrate possible lines of questioning:

- TABLE S-5A shows that 7% of the total cost difference between LI and NVA came from differences in total operations and maintenance costs, and that the LI per student expenditures in this area were 39% higher. A detailed study of this expense area could determine the extent to which this difference is caused by the dispersed LI model compared to the centralized NVA model.

- TABLE S-5B shows that 53% of the total cost difference between LI and NVA came from differences in total current expenditures for salaries, and that the LI per student expenditures for salaries were 40% higher. Adding current expenditures for benefits ($944 difference) to the salary differential ($2,850) results in a total differential for salaries and benefits of $3,794. This represents 71% of the total expenditure difference ($5,369) between LI and NVA. This difference cannot be readily explained by a higher number of staff on Long Island. TABLE S-6 shows that the numbers of total staff and of teaching staff on LI and in NVA are approximately equal, on a per student basis[19]. This suggests that the large cost difference is not due to significantly higher staffing ratios in the Long Island districts. A more likely explanation is the impact of the difference in the labor/management relationship between LI and NVA, as noted in Section 1. However, further study would be required in order to understand the causes of the large salary and benefits cost variation between the regions.

TABLE S-6
Students/Staff Ratio Comparisons

	Total Staff*		Teachers	
	#	Ratio	#	Ratio
Long Island	69,167	6.9	35,834	13.2
Northern Virginia	30,815	6.7	15,484	13.4

Source - NCES 2003-2004 Data

** Does not include staff provided by contractors, such as bus contractors on LI*

While TABLES S5-A and S5-B identify areas where LI school expenditures exceeded NVA expenditures, TABLE 4 also shows some areas where NVA expenditures exceeded those in Long Island. The two areas where NVA was significantly higher than LI were long term debt and capital expenditures – both being related to the school building boom occurring in NVA to keep up with the rapidly growing population, especially in Loudoun County.

Further review of functional areas of expense will undoubtedly provide additional insight into opportunities for Long Island. TABLE S-7 was created to identify some examples of areas that might be of interest for further study. CGR selected four types of expense where, in theory, costs would be reduced through economies of scale, i.e., by managing services on a regional basis[20]. TABLE S-7 shows that, in every one of these four areas, expenditures on Long Island were higher than in metro Northern Virginia, on both a per student and per capita comparison, and on a per square miles comparison for student transportation.

[19] The ratios for Total Staff would be even closer if the LI Total Staff numbers were adjusted for the fact that half of the districts on LI use private sector school bus contractors (which were not included in the NCES numbers) whereas the NVA districts run their school bus systems with district employees which were included in the NCES numbers.

[20] For an in-depth discussion of how these and other school district functions could be delivered more cost effectively on a regional basis, see *Thinking Beyond Boundaries, Opportunities to Use Regional and Local Strategies to Strengthen Public Education in the Broome-Tioga Region,* a report prepared by the Center for Governmental Research in December, 2004, available at www.cgr.org.

TABLE S-7
District Per Capita Expenditure Comparisons for Some Selected Functions

	Number of Districts Included	Number of Students	Capital Outlay Total Expenditures Row 2*	Support Services Total General Administration Row 10*	Support Services Total Operations & Maintenance Row 12*	Support Services Total Student Transportation Row 13*
LI TOTAL	***127***	***474,382***	***$ 808,646,000***	***$ 162,887,000***	***$ 645,415,000***	***$ 421,743,000***
LI Tot. Cost/Student			***$ 1,705***	***$ 343***	***$ 1,361***	***$ 889***
LI Tot. Cost/Capita [1]			***$ 294***	***$ 59***	***$ 234***	***$ 153***
LI Tot. Cost/Sq. Mile [2]						***$ 351,746***
NVA TOTAL	***3***	***206,859***	***$ 305,023,000***	***$ 16,888,000***	***$ 202,105,000***	***$ 108,099,000***
NVA Tot. Cost/Student			***$ 1,475***	***$ 82***	***$ 977***	***$ 523***
NVA Tot. Cost/Capita [2]			***$ 237***	***$ 13***	***$ 157***	***$ 84***
NVA Tot. Cost/Sq. Mile [3]						***$ 116,990***

Source - NCES 2003-2004 Data

** Matches corresponding row on Table S-3*

1. Based on 2005 ACS population estimates (Table 4) as 2004 not available for all entities. Fairfax City pop. added to Fairfax County

2. U.S. Census (Table 4). Fairfax City sq. miles added to Fairfax County

Revenue Comparisons

Long Island public schools cost more than public schools in metro Northern Virginia. However, the other important question is – who is paying these costs?

TABLE S-8 provides a comparison of the differences in how school districts were funded in the two regions. As the table shows, metro Northern Virginia districts placed a heavier burden on local residents to fund their districts – on average, 79% of metro Northern Virginia school district revenue came from local taxes (property, sales and other taxes), compared to Long Island's 65% local tax burden. New York State made up the difference, as it provided on average 32% of Long Island's school district revenues, compared to Virginia providing on average 18% of the revenues for the metro Northern Virginia districts. Even with the differential in state funding, however, the local revenue per capita, i.e. the local tax burden per capita, was $1,825 in Long Island, or 26% higher than the $1,446 local tax burden in metro Northern Virginia.

TABLE S-8
Sources of Current Operating Revenues - 2003-2004

	Local Revenues*	% Total	State Revenue	% of Total	Federal Revenue	% of Total	Total Revenues
Nassau	$ 2,664,446,000	73%	$ 913,993,000	25%	$ 95,271,000	3%	$ 3,673,710,000
Suffolk	$ 2,363,232,000	58%	$ 1,609,170,000	39%	$ 125,052,000	3%	$ 4,097,454,000
LI REVENUES TOTAL	***$ 5,027,678,000***	***65%***	***$ 2,523,163,000***	***32%***	***$ 220,323,000***	***3%***	***$ 7,771,164,000***
LI Rev/Student	***$ 10,598***		***$ 5,319***		***$ 464***		$ 16,382
LI Rev/Capita*	***$ 1,825***		***$ 916***		***$ 80***		$ 2,821
Fairfax County	$ 1,496,289,000	79%	$ 324,199,000	17%	$ 72,613,000	4%	$ 1,893,101,000
Falls Church City	$ 23,782,000	85%	$ 3,506,000	13%	$ 705,000	3%	$ 27,993,000
Loudoun County	$ 339,082,000	76%	$ 94,355,000	21%	$ 11,906,000	3%	$ 445,343,000
NVA REVENUES TOTAL	***$ 1,859,153,000***	***79%***	***$ 422,060,000***	***18%***	***$ 85,224,000***	***4%***	***$ 2,366,437,000***
NVA Rev/Student	***$ 8,988***		***$ 2,040***		***$ 412***		***$ 11,440***
NVA Rev/Capita*	***$ 1,446***		***$ 328***		***$ 66***		***$ 1,840***

Source - NCES 2003-2004 Data

** Includes property taxes, sales taxes and other local taxes*

*** Based on 2005 ACS population estimates shown in Table S-1*

Conclusion

The comparisons presented in this report clearly demonstrate that, in fiscal 2003-2004, there were significant differences in the costs of the school systems in Long Island and metro Northern Virginia, and differences in how those systems were funded. The NCES data used to create these comparisons only provided enough information to offer clues to explain why these differences occurred. However, these tables provide a logical point of departure for anyone interested in exploring why Long Island public school systems spent over $5,000 more, per student, than the public school systems in metro Northern Virginia. CGR believes that the data suggest that the cost differences can be partly explained by the structural differences due to the multi-district model found on Long Island, and partly due to inherent cost differences, primarily the cost of employees (which includes salaries and benefits). Further study would help better identify the impact of these two models on driving the costs of public education.

Section 3 - Fire Services: Different Models - Implications for Long Island

An analysis of fire services presents the clearest picture of the difference between the de-centralized, fragmented governance model in Long Island and the centralized governance model in metro Northern Virginia. In reviewing fire services, it is important to recognize that in both Long Island and metro Northern Virginia, fire departments provide rescue and emergency response services (EMS) in addition to responding to fire calls. The analysis that follows includes EMS services, where that data was made available. However, it is more difficult to directly compare EMS because the impact of EMS on each fire department depends on the mix of separate fire and ambulance services (which can be volunteer and/or private sector) used within a community. Still, CGR believes this analysis provides a fair representation of the demands for service placed upon fire departments in Long Island and NVA, and how communities in the two regions have organized their fire departments to respond to these needs.

Methodology

For Sections 1 and 2 of this report, CGR was able to draw on nationally recognized public databases that collected information about local governments and school districts uniformly for regions across the county. However, no publicly available database exists to permit a comprehensive comparison of fire departments across regions of the country. Thus, CGR created the tables in this section from a number of different sources. CGR compiled information about fire departments on Long Island primarily from 2004 data developed by *Newsday* for its November 2005 articles about Long Island fire departments, along with detailed expenditure data available from the New York State Office of the State Comptroller's (OSC) for 2004. Information about the fire departments in NVA was compiled based on CGR's analysis of published budget and operational information and extensive interviews with key personnel in the fire departments in the two counties and two cities[21]. As noted above, the information in this report reflects the data CGR collected for fire departments; therefore this is not a comprehensive analysis of EMS services in the two regions. We are aware that some EMS personnel, equipment and stations are not included in the tables – for example, Suffolk County has 27 EMS agencies, and thousands of volunteer EMS responders who are not included. However, the resulting tables represent our best effort to create a comprehensive "apples to apples" comparison for services provided by fire departments in the two regions based upon information available for fiscal year 2004.

Two Fundamental Differences in the Models

There are two fundamental differences between the regions that have profoundly affected the delivery of fire services as discussed in this report – how fire departments are structured and the use of volunteers.

There are 179 fire departments on Long Island. These departments are governed by many different legal entities consisting of: 122 fire districts, 31 villages, and 2 cities, with the remaining 24 being governed by various other organizations. Both Nassau and Suffolk have county departments that are involved in fire and EMS services. The Nassau Fire Commission and the Suffolk Department of Fire, Rescue and

[21] Both Fairfax and Loudoun County websites have extensive information about the county run operations, with references to related reports. See www.**fairfaxcounty**.gov/fr/ and www.co.**loudoun**.**va**.us/**fire**/

Emergency Services play important coordinating roles for fire, rescue and EMS, and provide countywide services such as centralized dispatch, training, hazmat units and inspections. However, the individual fire departments in the counties run as autonomous organizations, making their own command, management and resource allocation decisions, and are responsible for obtaining their own funding. Resource sharing and cross-department assistance occurs as a result of voluntary mutual aid agreements and cross-district cooperation arrangements.

In metro Northern Virginia, fire services management is much more centralized. Fairfax County runs a county-wide fire department. The City of Fairfax runs its own department, and the City of Falls Church has one fire station that is part of the Arlington County Fire Department. Loudoun County is currently undergoing a transition from a decentralized county with volunteer departments to a centralized model with increasing career staff. Loudoun has a county department of Fire and Rescue Services that provides central command and funding for the 17 independent volunteer fire companies within the county. Thus, in NVA, while there are technically 21 separate fire departments (two county, two city and 17 volunteer), for all practical purposes, fire/EMS services are centrally managed by four departments.

In Long Island, fire fighters are almost exclusively volunteers. The largest Long Island fire department with career firefighters is the City of Long Beach, which uses a combination of 165 volunteer firefighters and 25 career city employees. Departments across Long Island do spend millions of dollars for salaries and benefits, however, these are primarily for centralized county support operations, administrative and support services staff in various departments and paramedics to assist with EMS calls. In metro Northern Virginia, nearly half of all firefighters in the departments are career professionals and employees of the counties or cities, with the other half being volunteers. The transition from volunteer to career staffing has occurred in two different ways in NVA, as described next.

In 1949, Fairfax County established a countywide central fire dispatch system and hired 10 career firefighters to supplement what was then a system of all volunteer companies. In 1968, a volunteer company turned over its facility and assets to the county to operate and maintain. That started a trend towards the county taking ownership and responsibility for stations and equipment. In the early 1980's the county established minimum manning requirements for its stations and equipment, and by 1985, the county had approximately 1,000 career firefighters deployed in stations across the county. Currently, some stations and equipment are still owned by volunteer companies, however, the county is providing career staff at every station in the county, as well as paying for new equipment and facilities upgrades at stations. Thus, effectively all current and future costs for fire/rescue/EMS services are paid for in the county budget through the county Fire and Rescue Department, under the command of the county Fire Chief. In 2004, there were 1,280 career firefighters employed and centrally managed by the county, and approximately 350 volunteer firefighters living throughout the county. The volunteer firefighters provide the extra personnel needed to respond to emergencies that require more staffing than the core career staff can provide.

Loudoun County is currently undergoing the transformation from a volunteer to a combination volunteer/career fire services model managed centrally by the County Department of Fire, Rescue and Emergency Management. The county is still served by 17 independent volunteer fire and rescue companies who operate 20 stations that are staffed by a combination of career and volunteer firefighters.

Loudoun County officials began to consider a central county managed model in the late 1990's when the Chair of the Board of Supervisors created a committee to develop a master plan for fire/rescue/EMS services to meet the needs of the county in the 21'st century. As a next step, the County hired a national consultant (EMSSTAR) to design a model fire/rescue/EMS system to manage the facilities, staffing and equipment needs for these services. The EMSSTAR recommended model was based on creation of a single integrated County department. Subsequently, the County began the process of reconfiguring its

fire and EMS services to a centralized county model in 2002. In order to move that plan forward, the county government assigned all operational and administrative support for fire and EMS services within the county to the County Department of Fire, Rescue and Emergency Management, headed by a Fire Chief who is responsible for the entire system. At the same time, the Board of Supervisors appointed a seven member county Fire Commission, which included three representatives from volunteer fire companies and three representatives from volunteer EMS companies and the Fire Chief, to act as the body to help coordinate and facilitate the integration of the expanding force of career firefighters with the volunteer companies. The county began to substantially increase direct funding to the volunteer companies, and in January, 2007, the Board of Supervisors created a new countywide taxing district to pay for fire, rescue and EMS services.

Like Fairfax County, Loudoun County pays for career firefighters distributed at different stations throughout the county. In 2004, there were approximately 1,300 volunteer firefighters in the county and 385 career firefighters. The melding of the volunteers into a county-wide force in Loudoun County is still evolving, along with associated funding and operational decisions. For example, there is still a wide variation in how different stations are staffed – the station with the highest number of emergency calls (approximately 6,000 annually) is currently 100% volunteer. However, career staff are assigned throughout the county by the Chief as needed to ensure proper 24/7 coverage and response times. Thus, Loudoun is effectively operating under a single system model – the county department provides most of the funding, and all of the coordination, communications, investigation, code inspections, administration and planning for fire and EMS services provided within the county, and provides career staff as needed to supplement volunteers.

Basic Comparisons

TABLE F-1 provides basic comparison data for the fire departments in Long Island and metro Northern Virginia. The number of personnel shown does not include support people within the various departments, for example, administrative and maintenance staff, nor does it include all the ancillary equipment in the departments, nor does it include organizations that only provide EMS services. Thus, total fire and EMS operations are actually larger than shown in the table. However, TABLE 1 does illustrate the large relative difference in direct line fire personnel, equipment and stations dedicated to fire services in the two regions.

TABLE F-1 2004 Basic Fire Resources Comparisons - Absolute Numbers					
	Number of Stations	Number of Interior Career and Volunteer Firefighters [1]	Number of Engines	Number of Ladder Trucks	Number of Ambulances
Nassau	175	4,307	279	94	114
Suffolk	206	6,405	414	95	152
Total LI	***381***	***10,712***	***693***	***189***	***266***
Fairfax County	35	1,630	49	14	46
Loudoun County	20	1,685	37	7	38
City of Fairfax	2	85	3	1	3
City of Falls Church	1	36	1	1	1
Total NVA	***58***	***3,436***	***90***	***23***	***88***

Sources: Newsday, November 2005; Budgets and Interviews with NVA Fire Departments

1. Best comparison available assumes LI designated interior firefighters are comparable to NVA career and volunteer firefighters

Interior firefighters have highest level of training

2. Equipment listed includes reserves

Long Island has more land area, twice as many people, and the area on the west end of Long Island is more densely developed than metro Northern Virginia. Therefore, TABLE F-2 was created to standardize the raw data shown in TABLE F-1. TABLE F-2, which more fairly compares the allocation of resources to firefighting/EMS in the two regions, illustrates that there are significantly more personnel, stations and equipment devoted to firefighting/EMS in Long Island than in metro Northern Virginia.

TABLE F-2 2004 Fire/EMS Resources Standardized on Service Units					
	Comparison Based on Land Area				
	Number of Sq. Miles per Station	Number of Interior Firefighters per Sq. Mile	Number of Sq. Miles per Engine	Number of Sq. Miles per Ladder Truck	Number of Sq. Miles per Ambulance
LI	**3.15**	**8.93**	**1.73**	**6.34**	**4.51**
NVA	**15.93**	**3.72**	**10.27**	**40.17**	**10.50**
	Comparison Based on Population				
	Population Served by One Station	Population Served per Firefighter	Population per Engine	Population per Ladder Truck	Population per Ambulance
LI	**7,370**	**262**	**4,052**	**14,857**	**10,557**
NVA	**22,324**	**377**	**14,387**	**56,295**	**14,714**
	Comparison Based on Housing Units				
	Housing Units Served by One Station	Housing Units Served per Firefighter	Housing Units per Engine	Housing Units per Ladder Truck	Housing Units per Ambulance
LI	**2,616**	**93**	**1,438**	**5,274**	**3,748**
NVA	**8,509**	**144**	**5,483**	**21,456**	**5,608**

Sources: Table F-1 and Table 4

TABLES F-1 and F-2 describe the fire/EMS resources provided by the fire departments in the two regions in 2004. The tables demonstrate a clear difference between the regions in the resources dedicated to providing these services. For example, the comparisons of fire stations shown in TABLE F-2 show that on Long Island, the number of stations was 3 to 5 times higher, on a standardized basis, than metro Northern Virginia.

However, it is important to determine whether this significant variance was caused by either a higher demand for fire department services on Long Island and/or the fact that Long Island fire departments provided a higher level of service than their counterparts in metro Northern Virginia. CGR was unable to find any existing credible regional comparisons of fire departments across the country that were based on fact based standards. Thus, for this project, CGR had to create what we believe are fair and reasonable comparisons between LI and NVA using readily available comparative data. This information is provided in TABLES F-3, F-4A-C and F-5. While these comparisons only describe what is happening at a regional level, they do show that both the demand for the services and the quality of the response provided by fire departments in the two regions is roughly comparable. Put another way, with the data available, it is possible to conclude that demand for services and the quality of the response to that demand in the two regions is at least within the same order of magnitude. Thus, CGR believes that the order of magnitude differences in the amount of fire stations, equipment and personnel shown in TABLES 1 and 2 cannot be attributed solely to significant differences in demand or quality of response.

TABLES F-3, F-4A, F-4B and F-4C show the demand for services provided by fire departments in the two regions, as measured by calls for service. While TABLE F-3 provides the reported totals for calls for service, TABLES F-4A, F-4B and F-4C present the numbers on a per-unit basis to more fairly illustrate the differences between the regions.

TABLE F-3
2004 Calls for Service

	Number of Fire Calls	Number of EMS Calls	Total Calls
Nassau	36,464	39,073	75,537
Suffolk	46,905	60,536	107,633
Total LI	***83,369***	***99,609***	***183,170***
Fairfax County	23,128	62,420	85,548
Loudoun County	5,467	13,819	19,286
City of Fairfax	898	3,026	3,924
City of Falls Church	211	620	831
Total NVA	***29,704***	***79,885***	***109,589***

Sources: Newsday, November 2005; Budgets and Interviews with NVA Fire Departments

TABLE F-4A 2004 Fire Calls Standardized on Service Units	
	Fire Calls per
	Capita
LI	1 per 33.68 persons
NVA	1 per 43.59 persons
	Fire Calls per
	Housing Units
LI	1 per 11.96 units
NVA	1 per 16.61 units
	Fire Calls per
	Square Mile
LI	69.53 calls per sq. m.
NVA	32.15 calls per sq. m.

Sources: Table F-3 and Table 4

TABLE F-4B 2004 EMS Calls Standardized on Service Units	
	EMS Calls per
	Capita
LI	1 per 28.19 persons
NVA	1 per 16.21 persons
	EMS Calls per
	Housing Unit
LI	1 per 10.01 units
NVA	1 per 6.18 units
	EMS Calls per
	Square Mile
LI	83.08 calls per sq. m.
NVA	86.46 calls per sq. m.

Sources: Table F-3 and Table 4

TABLE F-4C 2004 Total Calls Standardized on Service Units	
	Total Calls per
	Capita
LI	1 per 15.33 persons
NVA	1 per 11.81 persons
	Total Calls per
	Housing Unit
LI	1 per 5.43 units
NVA	1 per 4.50 units
	Total Calls per
	Square Mile
LI	152.77 calls per sq. m.
NVA	118.60 calls per sq. m.

Sources: Table F-3 and Table 4

TABLE F-4A shows that in 2004 fire departments in Long Island experienced more *fire calls* per capita, per housing unit and per square mile. This makes sense on a regional basis, as Long Island's building

stock is older.[22] TABLE F-4B shows that metro Northern Virginia experienced more *EMS calls* per capita, per housing unit and per square miles than Long Island. While this may not appear logical on its face since the population on Long Island is older[23], CGR assumes that the count shown for EMS calls on Long Island is low because the count of EMS calls in this report is based on the *Newsday* data, which did not include EMS calls serviced by the other non-fire department EMS agencies on Long Island. In metro Northern Virginia, all EMS calls were responded to by the fire departments. TABLE F-4C shows that for the Total Calls for the year, metro Northern Virginia experienced more total calls per capita and per housing unit, while Long Island had more total calls per square mile.

TABLE F-5 provides a different perspective for the two regions. TABLE F-5 presents a way to compare the quality of the fire services being provided in the two regions.

One fact-based quality indicator is the measure of firefighting capacity based upon a recognized national standard - the Public Protection Classifications system developed for and administered by the Insurance Services Office (ISO). ISO periodically evaluates fire department(s) in a community to determine the speed and effectiveness of the department for extinguishing fires. ISO community ratings are based on a scale of 1 to 10, with 1 being the best. The better the rating, the lower the cost of fire insurance (since better fire-fighting capacity helps minimize property loss.) ISO inspection teams apply a uniform set of measures across the country that measure, among other items, emergency communications systems, fire department equipment, staffing and station locations and water supply. Most urbanized areas with public water lines have ratings in the 3-7 range across the country. Rural areas have a class rating of 9 – where buildings are within five miles of a fire station but over 1,000 feet from a sufficient water supply; or a rating of 10, which is assigned to properties greater than 5 road miles from a fire station. A mixed classification (e.g. 3/9) is assigned when a portion of the community is well covered (a rating of 3), but a portion of the community only meets the criteria to warrant a rating of 9.

TABLE F-5 shows the range of ISO ratings for the counties in LI and NVA. Individual characteristics of different communities create different rating classifications; hence, for example, Loudoun has communities that are rated 6/9, because the western portion of the county is still rural. However, both Nassau and Suffolk also have a few communities with mixed ratings.

Another quality of service indicator that could be used to compare the regions, in theory, would be response time. However, CGR found, in comparing published response time figures from different departments in both regions, that the methods for measuring and reporting response times were inconsistent both within regions and between regions. TABLE F-5 provides reported response time information. Since there are many fire departments in Nassau and Suffolk, the table shows the time for the department having the lowest (i.e. fastest) average response time, and the department having the highest (slowest) average response time. Since the NVA counties only reported response time goals, and the percentage of time they met the goals, it was not possible to make a direct comparison for response time between LI and NVA. However, the table does provide the best comparison available.

[22] The median year housing units were built: Nassau – 1953; Suffolk – 1966; Fairfax County – 1978; Loudoun County – 1990; Fairfax City – 1965; Falls Church City – 1959. Source – 2000 Census

[23] For Long Island, 24.7% of the population was 55 or older in 2005, compared to 19.9% of the NVA population being 55 or older. Source – 2005 American Community Survey

TABLE F-5 Comparative Quality and Response Measures for the Two Regions						
			Average	Average	Average	Average
	ISO	ISO	Fire	Fire	EMS	EMS
	Rating	Rating	Response	Response	Response	Response
	Range	Range	Times -	Times -	Times -	Times -
	High*	Low*	Low**	High**	Low**	High**
Nassau	2	4/9	3:36	10:56	3:47	11:51
Suffolk	3	9	4:03	11:27	5:43	14:16
Fairfax County	3		Goal 5 min. - Meet 57%***		Goal 6 min. - Meet 79%***	
Loudoun County	4	9	7:69 avg. for county		7:03 avg. for county	
City of Fairfax	3		Goal 6 min. - Meet 80%***		Goal 6 min. - Meet 80%***	
City of Falls Church	3		3:54		3:39	

Sources: Newsday, November 2005; interviews with NVA Fire Departments

* *The lower the ISO number, the better the rating*

** *Times are minutes and seconds*

*** *Shows percentage of time the county is meeting the goal*

In summary, CGR believes that the comparability in the range of ISO ratings and response times presented in TABLE F-5 indicates that the quality of fire services overall in the two regions is reasonably similar, within the limits of our ability to measure. This data provides at least some factual confirmation to support the claims made by fire departments in both regions that they are providing "first class" service to their communities.

To complete the comparison of the difference in the two models, CGR obtained data about the costs of fire service in the two regions. The results are shown in TABLES F-6 and F-7.

TABLE F-6 2004 Costs for Fire Service - Absolute Numbers				
	Personnel Costs	Equipment/ Capital Costs	Operating Costs	Total Costs	Total Costs Excluding Personnel
Nassau	$ 34,241,357	$ 38,141,382	$ 73,432,304	$ 145,815,043	$ 111,573,686
Suffolk	$ 30,056,474	$ 48,241,313	$ 71,840,299	$ 150,138,086	$ 120,081,612
Total LI	***$ 64,297,831***	***$ 86,382,695***	***$ 145,272,603***	***$ 295,953,129***	***$ 231,655,298***
Fairfax County	$ 135,081,006	$ 16,523,606	$ 17,359,976	$ 168,964,588	$ 33,883,582
Loudoun County	$ 16,884,912	$ 7,684,768	$ 8,437,084	$ 33,006,764	$ 16,121,852
City of Fairfax	$ 8,968,618	$ 191,955	$ 1,230,638	$ 10,391,211	$ 1,422,593
City of Falls Church	$ 1,144,836	$ 2,543	$ 58,151	$ 1,205,530	$ 60,694
Total NVA	***$ 162,079,372***	***$ 24,402,872***	***$ 27,085,849***	***$ 213,568,093***	***$ 51,488,721***

Sources: 2004 N.Y.State Comptroller expenditure data for Nassau and Suffolk, 2004 budgets and interviews with Virginia fire dept. personnel

TABLE F-7 2004 Costs Standardized for Service Units					
	Personnel Costs per Capita	Equipment/ Capital Costs per Capita	Operating Costs per Capita	Total Costs per Capita	Total Costs Not Including Personnel per Capita
LI	**$ 22.90**	**$ 30.76**	**$ 51.73**	**$ 105.39**	**$ 82.50**
NVA	**$ 125.18**	**$ 18.85**	**$ 20.92**	**$ 164.94**	**$ 39.77**
	Personnel Costs per Housing Unit	Equipment/ Capital Costs per Housing Unit	Operating Costs per Housing Unit	Total Costs per Housing Unit	Total Costs Not Including Personnel per Housing Unit
LI	**$ 64.50**	**$ 86.66**	**$ 145.73**	**$ 296.89**	**$ 232.39**
NVA	**$ 328.43**	**$ 49.45**	**$ 54.89**	**$ 432.76**	**$ 104.33**
	Personnel Costs per Sq. Mile	Equipment/ Capital Costs per Sq. Mile	Operating Costs per Sq. Mile	Total Costs per Sq. Mile	Total Costs Not Including Personnel per Sq. Mile
LI	**$ 53,626**	**$ 72,046**	**$ 121,161**	**$ 246,833**	**$ 193,207**
NVA	**$ 175,411**	**$ 26,410**	**$ 29,314**	**$ 231,134**	**$ 55,724**

Sources: Table F-6 and Table F-2

Total personnel costs for metro Northern Virginia were five to ten times higher than in Long Island (depending on the unit of service compared), because northern Metro Virginia's departments rely on career staff to provide the core firefighting personnel. Clearly, the Long Island model of using volunteer firefighters is more cost effective from the point of view of personnel costs. On a per capita basis, personnel costs in 2004 for metro Northern Virginia were 5.7 times higher than on Long Island. As a result, the total costs per capita were higher in metro Northern Virginia by about 50% on both a per capita and per housing unit comparison, and effectively the same on a per square mile basis.

However, equipment, capital and ongoing maintenance costs on Long Island were far higher than those same costs in metro Northern Virginia. Equipment/capital costs per capita were $11.91 (63.2%) higher on LI than in NVA. Operating costs per capita were $30.81 (147.3%) higher on LI. than in NVA. To summarize these differences, the last column in TABLE F-7 shows the cost differences in the models excluding personnel costs. Total costs not including personnel costs, per capita, were $42.74 (107.4%) higher on LI than in NVA.

Implications for Long Island

The comparison data about fire services highlights some important issues for Long Island. It is clear from the first two tables that there are substantially more people, more stations and more equipment dedicated to providing fire services in Long Island compared with metro Northern Virginia, despite the fact that TABLES F-3 and F-4 show that the demand for service and fire fighting response quality is roughly equivalent between the two regions. Further, the difference in resources dedicated to fire departments in LI do not appear, based on TABLE F-5, to provide a measurably superior ISO rating for communities in the region, or faster response times. Thus, it would appear that, despite the differences in resources dedicated to fire services between the two models, that both models result in the provision of effective fire services.

However, TABLES F-6 and F-7 provide an important insight into key differences between the two models. The metro Northern Virginia model was more costly in 2004, in total, on a per unit served basis. This was entirely due to the fact that nearly one-half of metro Northern Virginia's firefighting personnel were career

staff. Certainly, the volunteer model in Long Island was more cost effective from the point of view of personnel costs. On the other hand, Long Island fire departments, from a regional perspective, were not as cost effective in terms of fires stations, vehicles, equipment and operating costs as metro Northern Virginia.

TABLES F-6 and F-7 demonstrate that the single county, centralized model for managing fire services is clearly more cost efficient in terms of equipment, capital and operating costs. This is a consequence of the amount of resources dedicated to fire services, as shown in TABLE F-1. The metro Northern Virginia model demonstrates that centralized management results in the need for far less personnel, facilities and equipment while still providing high level fire, rescue and EMS services in a region. The trade-off in metro Northern Virginia has been that although fewer personnel overall were needed, volunteers have been replaced by career professionals. In effect, the Northern Virginia model has evolved by paying more for personnel and tightly managing equipment/capital and operating costs, which is the opposite of the Long Island model, where equipment/capital and operating costs have been allowed to grow as an offset to keeping personnel costs low through the use of volunteers.

The differences between these models have an important implication for Long Island. Currently, Long Island's fire services personnel costs are sufficiently lower than metro Northern Virginia's personnel cost to more than offset Long Island's higher equipment/capital and operating costs. However, as it becomes increasingly difficult to attract sufficient volunteers to provide a high level of fire services on Long Island, more and more career firefighters will have to be added to fire services, and Long Island's total personnel costs will rise rapidly. As future personnel costs rise rapidly, the only way to offset those cost increases will be to reduce equipment/capital and operating costs. In other words, as Long Island's personnel costs increase, fire services will need to try to achieve the operating efficiencies the metro Northern Virginia area has achieved. Otherwise, fire services in Long Island will potentially find themselves facing *both* high personnel costs *and* high equipment/capital and operating costs.

Metro Northern Virginia presents one model for creating a centralized management structure that effectively manages fire services costs. In order to plan for regional operating efficiencies to offset increased personnel costs in the future, Long Island needs to consider inventing one or more structures to make regional resource allocation decisions across the two counties and 179 fire departments. Perhaps this will involve developing a regional cooperative planning agency. Or, perhaps the two counties in Long Island will become central fire services management agencies like their counterparts in Virginia. However managing fire services evolves in Long Island, this report should provide a starting point for discussing the need to address the challenges in providing cost effective fire services in the future.

APPENDIX

NCES Code Category Definitions

Source: NCES - http://nces.ed.gov/ccd/bat/

Total Students (UG, PK-12)
This is the total number of students (ungraded and prekindergarten through 12th grade) as reported by the district. In some cases, this may not be equal to the total number of students as reported by the schools in the district, since some district students may attend schools outside the district.

Total Staff
This value is the sum of all FTE Teacher and Staff positions.

FTE Teachers
This is the Full Time Equivalent count of teachers as reported by the school district. This count is not the same as the total of teachers from individual schools. This count includes teachers not assigned to specific schools.

School Administrators
This is the Full Time Equivalent count of principals and other staff concerned with directing and managing the operation of a particular school as reported by the school district.

School Administrative Support Staff
The count of persons whose activities are concerned with support of the teaching and administrative duties of the office of the principal or department chairpersons, including clerical staff and secretaries.

Total Expenditures
Total expenditures made by school districts, including current expenditures for public elementary and secondary education, and expenditures for facilities acquisition and construction, replacement equipment, other programs and interest on debt. Transfer payments to other school systems are not included in this total. Transfer payments to state and local governments are included in this total.

Total Expenditures - Capital Outlay
Total spending for construction, instructional equipment, non-specified equipment, land and existing structures and all other capital outlay expenditures and equipment.

Total Curr. Expend. - Instruction
Total current expenditures for instruction for public prekindergarten and kindergarten through grade 12 programs. This includes teacher salaries and benefits and instructional supplies and purchased services. Tuition payments to other school districts are excluded.

Total Curr. Expend. - Support Services
Support services expenditures are current expenditures for activities that support instruction. These services include operation and maintenance of buildings, school administration, student support services (e.g., nurses, therapists, and guidance counselors), student transportation, instructional staff support (e.g., librarians, instructional specialists), school district administration, business services, research, and data processing.

Total Curr. Expend. - Other EL-SEC Programs
The total current expenditures for other Elementary-Secondary programs includes expenditures for food services and enterprise operations.

Total Curr. Expend. - Non EL-SEC Programs (District-Fin.)
The total current expenditures for other Non-Elementary-Secondary programs include current expenditures for community services, adult education, and community colleges (if run by the school district). Also includes payments to other school districts, and payments to state and local government agencies.

Total Curr. Expend. - Elem. Sec. Educ. (District-Fin.)
The total current expenditures for public elementary and secondary education that are associated with the day-to-day operations of the school district. These include expenditures for charter schools, if they exist in the district. They exclude long term expenditures (like capital outlays), debt service, and expenditures beyond the scope of public, elementary and secondary education.

Instruction Expenditures - Total (District-Fin.)
Total current expenditures for instruction of public prekindergarten and kindergarten through grade 12 programs. This includes teacher salaries and benefits and instructional supplies and purchased services. Tuition payments to other school districts are excluded.

Total - Students- Supp. Serv. Exp. (District-Fin.)
Pupil support spending includes expenditures for guidance, health, and logistical support that enhance instruction. These expenditures include attendance, social work, student accounting, counseling, student appraisal, information, record maintenance, and placement services.

Total - Instruct. Staff- Supp. Serv. Exp. (District-Fin.)
Instructional staff support spending includes expenditures for supervision of instruction service improvements, curriculum development, instructional staff training, and media, library, audiovisual, television, and computer-assisted instruction services.

Total - Gen. Admin.- Supp. Serv. Exp.
General Administration spending includes expenditures for board of education and executive administration services, and other LEA administrative functions.

Total - Sch. Admin.- Supp. Serv. Exp.
School Administration spending includes expenditures for the office of the principal services.

Total - Ops. & Mainten.- Supp. Serv. Exp.
Operation and Maintenance of Plant spending includes expenditures for buildings services, care and upkeep of grounds and equipment, non-student transportation, and security services.

Total - Student Transp.- Supp. Serv. Exp.
Student transportation spending includes expenditures for vehicle operation, monitoring riders, and vehicle servicing and maintenance. School bus purchases are reported in other equipment.

Total - Other Supp. Serv.- Supp. Serv. Exp. (District-Fin.)
Business / Central / and Other support program spending includes expenditures for fiscal services, purchasing, warehousing, supply distribution, printing, research and development, evaluation, information, and management services.

Food Services - Non Instuctional (District-Fin.)
Food services spending includes expenditures for cafeteria operations to include the purchase of food but excluding the value of donated commodities and purchase of food service equipment.

Current Spending - Public Charter Schools (District-Fin.)
Payments to Public charter schools include expenditures to all public charter schools for tuition and for any other reason.

Total Current Expenditures - Salary (District-Fin.)
Total current expenditures for salaries.

Instruction Expenditures - Salary (District-Fin.)
Expenditures for gross salaries paid to regular and part-time teachers, teacher aides, homebound teachers, hospital-based teachers, substitute teachers and teachers on sabbatical leave.

Salary - Students- Supp. Serv. Exp. (District-Fin.)
Expenditures include salaries in attendance and social worker services, guidance, health, psychology, speech pathology, and audiology services for students. Salaries include the gross salaries of permanent and temporary employees on the payroll of a local education agency including those substituting for permanent employees. Salaries for full- and part-time staff are included along with overtime and salaries for staff on sabbatical leave. It also includes supplemental amounts for additional duties such as coaching or supervising extracurricular activities, bus supervision, and summer school teaching.

Salary - Instruct. Staff- Supp. Serv. Exp. (District-Fin.)
Expenditures include salaries for supervisors of instruction (not department chairs), library and media center staff, computer lab staff, curriculum coordinators, and in-service teacher training staff. Salaries include gross salaries of permanent and temporary employees on the payroll of a local education agency including those substituting for permanent employees. Salaries for full- and part-time staff are included along with overtime and salaries for staff on sabbatical leave.

Salary - General Admin.- Supp. Serv. Exp. (District-Fin.)
Expenditures include salaries for board of education staff, board support staff, staff relations and negotiations staff, the superintendent and superintendent's staff. Salaries include gross salaries of permanent and temporary general administration employees on the payroll of a local education agency including those substituting for permanent employees. Salaries and overtime for full- and part-time staff are included along with salaries for staff on sabbatical leave.

Salary - School Admin.- Supp. Serv. Exp. (District-Fin.)
Expenditures include salaries of school principals and staff, and department chairs. Salaries include gross salaries of permanent and temporary school administration staff on the payroll of a local education agency, including those substituting for permanent employees. Salaries and overtime for full- and part-time staff are included along with salaries for staff on sabbatical leave.

Salary - Ops. & Mainten.- Supp. Serv. Exp. (District-Fin.)
Expenditures include salaries of staff responsible for care, operation and maintenance of school and school district facilities. Salaries include gross salaries of permanent and temporary Operations and Maintenance staff on the payroll of a local education agency, including those substituting for permanent employees. Include salaries and overtime for full- and part-time staff.

Salary - Student Transp.- Supp. Serv. Exp. (District-Fin.)
Expenditures for gross salaries of permanent and temporary student transportation staff on the payroll of a local education agency, including those substituting for permanent employees. Salaries and overtime for full- and part-time staff are included.

Salary - Other Supp. Serv.- Supp. Serv. Exp. (District-Fin.)
Expenditures for the gross salaries of permanent and temporary business, central and other support services staff on the payroll of a local education agency, including those substituting for permanent employees. Salaries and overtime for full- and part-time staff are included.

Salary - Food Serv.- Non-Instruct. (District-Fin.)
Expenditures for the gross salaries of permanent and temporary food services staff on the payroll of a local education agency, including those substituting for permanent employees. Salaries and overtime for full- and part-time staff are included along with salaries for staff on sabbatical leave.

Total Current Expenditures - Benefits (District-Fin.)
Total current expenditures for employee benefits.

Teacher Salaries - Regular Education Programs (District-Fin.)
Expenditures for base salaries paid to certified teachers of regular instructional programs. These data are taken from the CCD Local Education Agency Finance Survey.

Teacher Salaries - Special Education Programs (District-Fin.)
Expenditures for base salaries paid to certified teachers of special education programs. These data are taken from the CCD Local Education Agency Finance Survey.

Teacher Salaries - Vocational Education Programs (District-Fin.)
Expenditures for base salaries paid to certified teachers of vocational education programs. These data are taken from the CCD Local Education Agency Finance Survey.

Teacher Salaries - Other Education Programs (District-Fin.)
Expenditures for base salaries paid to certified teachers of other instructional programs. These data are taken from the CCD Local Education Agency Finance Survey.

Textbooks for Instruction (District-Fin.)
Expenditures for textbooks used for classroom instruction. These data are taken from the CCD Local Education Agency Finance Survey.

Instruct. Expend. - Employee Benefits (District-Fin.)
Expenditures for fringe benefits such as group insurance, social security and retirement contributions, tuition reimbursement, unemployment and workers compensation. Benefits are expenditures made in addition to gross salary and not paid directly to employees.

Empl. Benefits - Students- Supp. Serv. Exp. (District-Fin.)
Expenditures for benefits to staff providing attendance and social worker services, guidance, health, psychology, speech pathology, and audiology services for students. Benefits are expenditures made in addition to gross salary and not paid directly to employees. They include amounts paid on behalf of an LEA for fringe benefits such as group insurance, social security contributions, retirement contributions, tuition reimbursements, unemployment compensation, worker's compensation, and other employee benefits.

Empl. Benefits - Instruction- Supp. Serv. Exp. (District-Fin.)
Expenditures for benefits to supervisors of instruction (not department chairs), library and media center staff, computer lab staff, curriculum coordinators, and in-service teacher training staff. Benefits are expenditures made in addition to gross salary and not paid directly to employees. They include amounts paid on behalf of an LEA for fringe benefits such as group insurance, social security contributions, retirement contributions, tuition reimbursements, unemployment compensation, worker's compensation, and other employee benefits.

Empl. Benefits - Gen. Adm.- Supp. Serv. Exp.
Expenditures made in addition to gross salary to general administration employees. These expenditures are not paid directly to employees. They include fringe benefits such as group insurance, social security contributions, retirement contributions, tuition reimbursements, unemployment compensation, worker's compensation, and other employee benefits. They include amounts paid by the state on behalf of an LEA for employee benefits for general administration staff.

Empl. Benefits - Sch. Adm.- Supp. Serv. Exp.
Expenditures made in addition to gross salary to school administration employees. These expenditures are not paid directly to employees. They include fringe benefits such as group insurance, social security contributions, retirement contributions, tuition reimbursements, unemployment compensation, worker's compensation, and other employee benefits. They include amounts paid by the state on behalf of an LEA for employee benefits for school administration staff.

Empl. Benefits - Ops. & Maint.- Supp. Serv. Exp.
Expenditures made in addition to gross salary to operations and maintenance employees. These expenditures are not paid directly to employees. They include fringe benefits such as group insurance, social security contributions, retirement contributions, tuition reimbursements, unemployment compensation, worker's compensation, and other employee benefits. They include amounts paid by the state on behalf of an LEA for employee benefits for operations and maintenance staff.

Empl. Benefits - Sch. Trans.- Supp. Serv. Exp.
Expenditures made in addition to gross salary to student transportation employees. These expenditures are not paid directly to employees. They include fringe benefits such as group insurance, social security contributions, retirement contributions, tuition reimbursements, unemployment compensation, worker's compensation, and other employee benefits. They include amounts paid by the state on behalf of an LEA for employee benefits for student transportation staff.

Empl. Benefits - Other Supp. Serv.- Supp. Serv. Exp. (District-Fin.)
Expenditures made in addition to gross salary to business, central and other support service employees. These expenditures are not paid directly to employees. They include fringe benefits such as group insurance, social security contributions, retirement contributions, tuition reimbursements, unemployment compensation, worker's compensation, and other employee benefits. They include amounts paid by the state on behalf of an LEA for employee benefits for business support staff.

Empl. Benefits - Food Serv.- Non-Instruct. (District-Fin.)
Expenditures made in addition to gross salary and not paid directly to staff that provide food to students and staff in a school or LEA. These expenditures include fringe benefits such as group insurance, social security contributions, retirement contributions, tuition reimbursements, unemployment compensation, worker's compensation, and other employee benefits. They include amounts paid by the state on behalf of an LEA for employee benefits for other food services staff.

Community Services - Non EL-SEC (District-Fin.)
Community services spending includes expenditures for any local education agency program that provides non-educational services such as, operation of a swimming pool, public library, programs for the elderly, and child care.

Adult Education - Non EL-SEC (District-Fin.)
Adult education spending includes expenditures for provision of GED or other classes offered by the local education agency outside the elementary-secondary curriculum.

Construction - Capital Outlay (District-Fin.)
Construction spending includes expenditures for the construction of fixed assets.

Instructional Equipment - Capital Outlay (District-Fin.)
Instructional equipment spending includes expenditures for all instructional equipment recorded in general and operating funds under "instruction."

Other Equipment - Capital Outlay (District-Fin.)
Other equipment spending includes all other capital outlay expenditures and equipment.

Land & Existing Structures - Capital Outlay (District-Fin.)
Expenditures for acquiring already existing fixed assets such as land and existing buildings.

Payments to Other School Systems (District-Fin.)
Payment to other school systems include all payments to in-state and out-of-state school systems for transportation, computer and purchasing services and tuition.

Interest on School System Indebtedness (District-Fin.)
Interest on debt payments include all expenditures for interest incurred on both long-term and short-term indebtedness of the school system, excluding principal payments.

Current Spending - Private Schools (District-Fin.)
Payments to Private schools include expenditures to all private schools for tuition and for any other purpose.

LT Debt - Outstanding at End of FY (District-Fin.)
Long Term Debt—Bonded indebtedness and any other school district interest-bearing debt with a term of more than one year, that is outstanding at the end of the fiscal year.

Total Revenue - Local Sources
Local revenues include revenues from such sources as local property and nonproperty taxes, investments, and revenues from student activities, textbook sales, transportation and tuition fees, and food service revenues.

Total Revenue - State Sources
State revenues include both direct funds from state governments and revenues in lieu of taxation. Revenues in lieu of taxes are paid to compensate a school district for nontaxable state institutions or facilities within the district's boundary.

Total Revenue - Federal Sources
Total revenues from the Federal Government.