Town of Philipstown & the Hudson Highlands Land Trust

Philipstown Buildout Analysis

October 11, 2006

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Testing the Town Zoning Law

- Residents often assume that zoning regulations protect them from inappropriate development.
- Zoning and subdivision regulations typically prescribe how all buildable land is to be developed.
- Build out analysis allows a community to "test" its regulations by taking a peek into the future.

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What is a build out analysis?

- An estimate of the cumulative growth on a town's land areas once all developable land has been consumed and converted to uses currently permitted by zoning.
- Helps to visualize the patterns of growth through maps of developed and undeveloped lands.

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What is a build out analysis?

- A tool designed to assist residents and decision-makers of the impacts of growth.
- Identifies public services that need to be available to accommodate growth.
- Helps to estimate the costs and revenues required to meet changing needs.

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What is a build out analysis?

- Helps to identify resource constraints that may impede new development.
- Helps in the selection of policy alternatives to accommodate or mitigate growth.
- It is not a prediction of what will occur but can show the consequences of inaction.

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Analysis Assumptions

- Only residential (single-family) development analyzed. Commercially zoned properties were not examined.
- Parcels < 2 acres & those in the R-40 District:
  - Vacant & underdeveloped parcels – 1 unit/1.5 acres
- Open Development Area (ODA) was applied as follows:
  - Vacant parcels 2 to 14 acres – 2 new lots
  - Underdeveloped parcels 2 to 14 acres – 1 new lot
  - For vacant parcels 15 to 42 acres – 4 new lots
  - Underdeveloped parcels 15 to 42 acres – 3 new lots
- Parcels > 42 acres:
  - Vacant parcels – 1 unit/5 acres
  - Underdeveloped parcels – 1 unit/5 acres minus the minimum lot size of the underlying zoning district
- Additional lots for conservation easement properties are assumed to be developed.
- Planned Development Districts were not considered.

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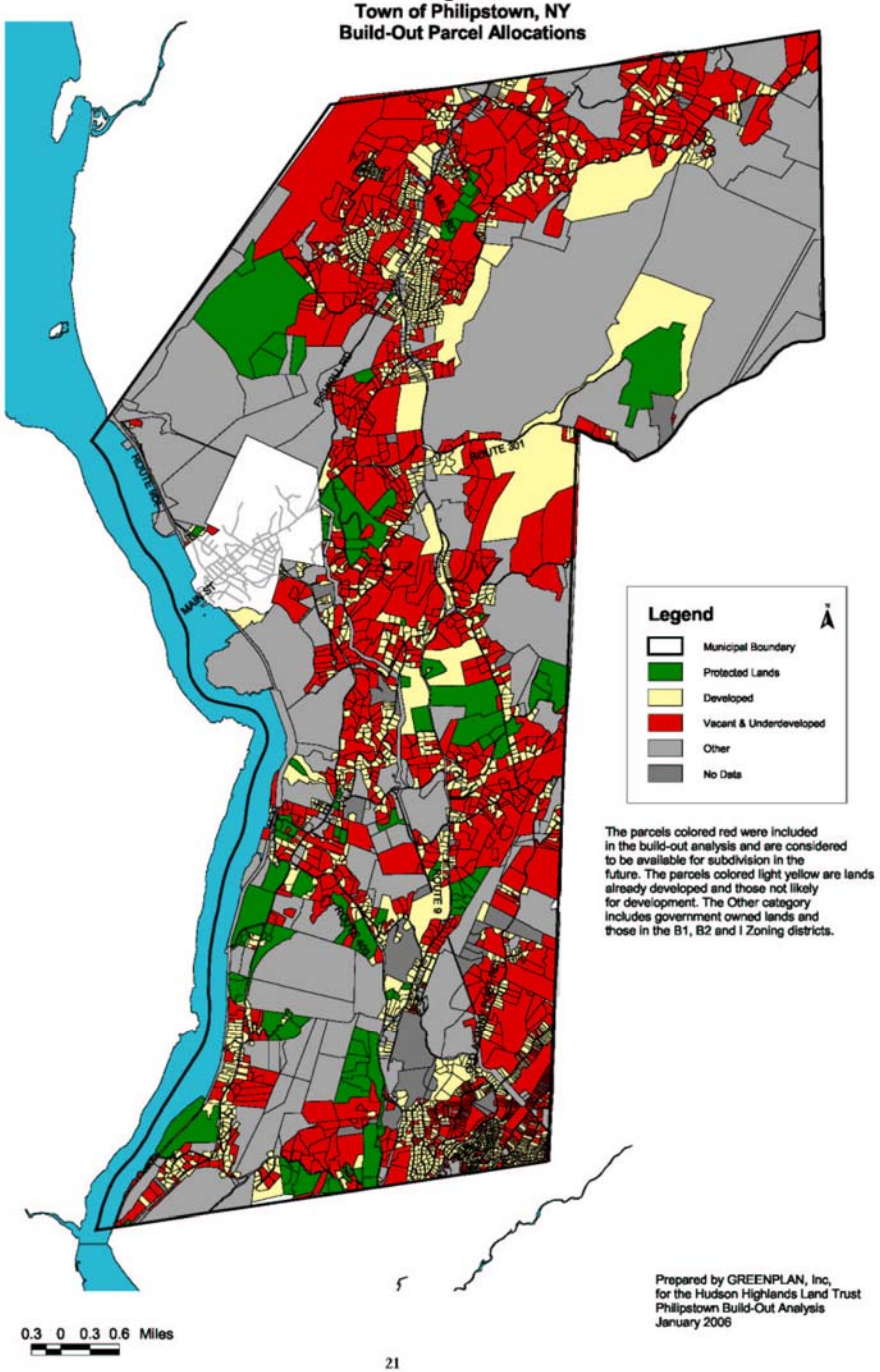
Figure 1
Town of Philipstown, NY
Build-Out Parcel Allocations



The parcels colored red were included in the build-out analysis and are considered to be available for subdivision in the future. The parcels colored light yellow are lands already developed and those not likely for development. The Other category includes government owned lands and those in the B1, B2 and I Zoning districts.

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for the Hudson Highlands Land Trust
Philipstown Build-Out Analysis
January 2006

Steps in the process:

1. All constrained lands are subtracted from the Town‘s land area.

   The result is a “net usable land area”.

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Natural Constraints Identified:

Parcels < 2 acres:

- New York State protected freshwater wetlands and their adjacent 100-foot buffer
- Federal wetlands identified under the National Wetlands Inventory

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Natural Constraints Identified:

Parcels 42 acres and greater:

- New York State protected freshwater wetlands and their adjacent 100-foot buffer
- Federal wetlands identified under the National Wetlands Inventory
- Water Bodies
- Slopes Greater than 35%
- 50% of the Slopes 25% to 34%
- Hydric (unbuildable) soils

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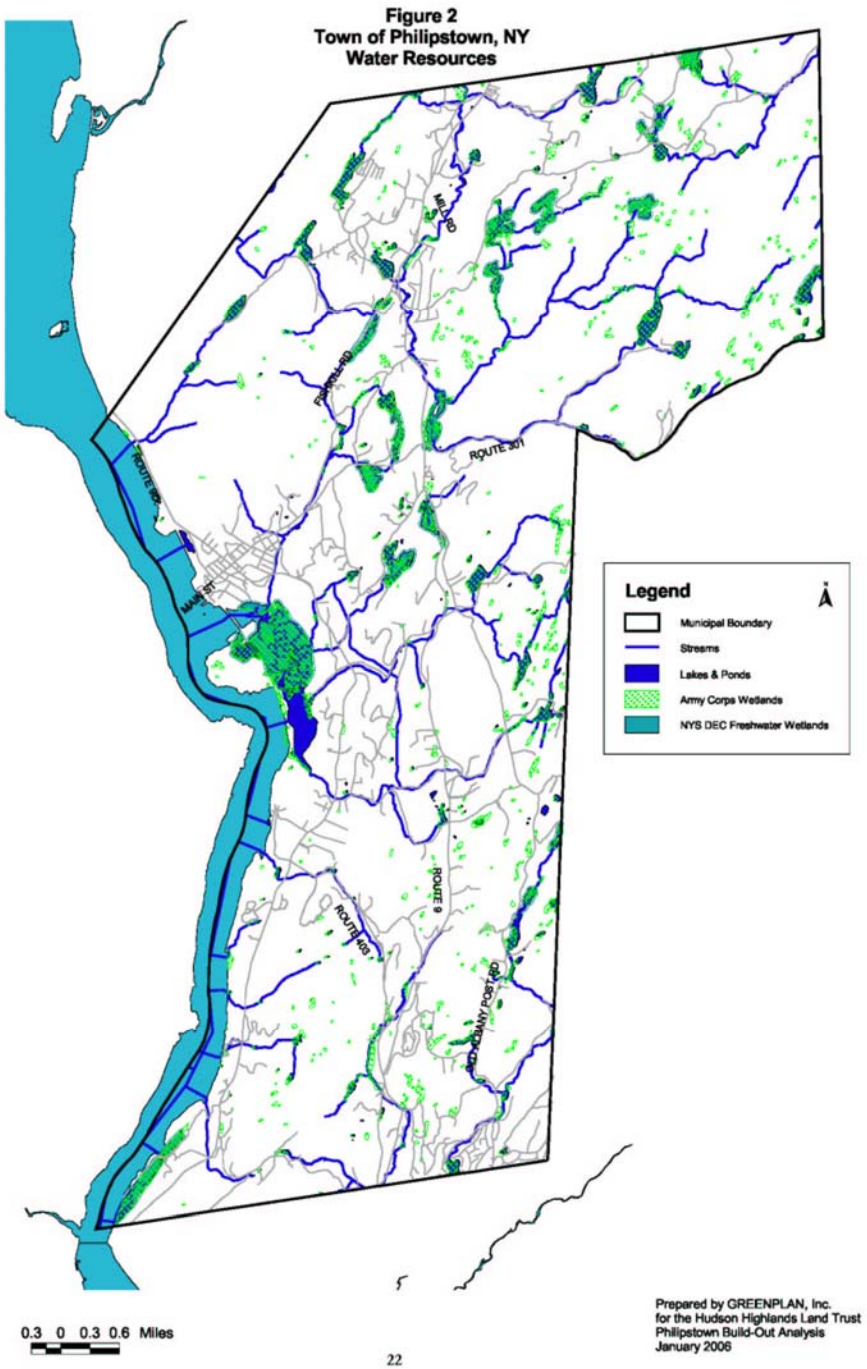
Figure 2
Town of Philipstown, NY
Water Resources
ROUTE 301
ROUTE 9
ROUTE 9D
ACADEMY POST RD
Legend
Municipal Boundary
Streams
Lakes & Ponds
Army Corps Wetlands
NYS DEC Freshwater Wetlands
0.3 0 0.3 0.6 Miles
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Figure 3
Town of Philipstown, NY
Hydric Soils

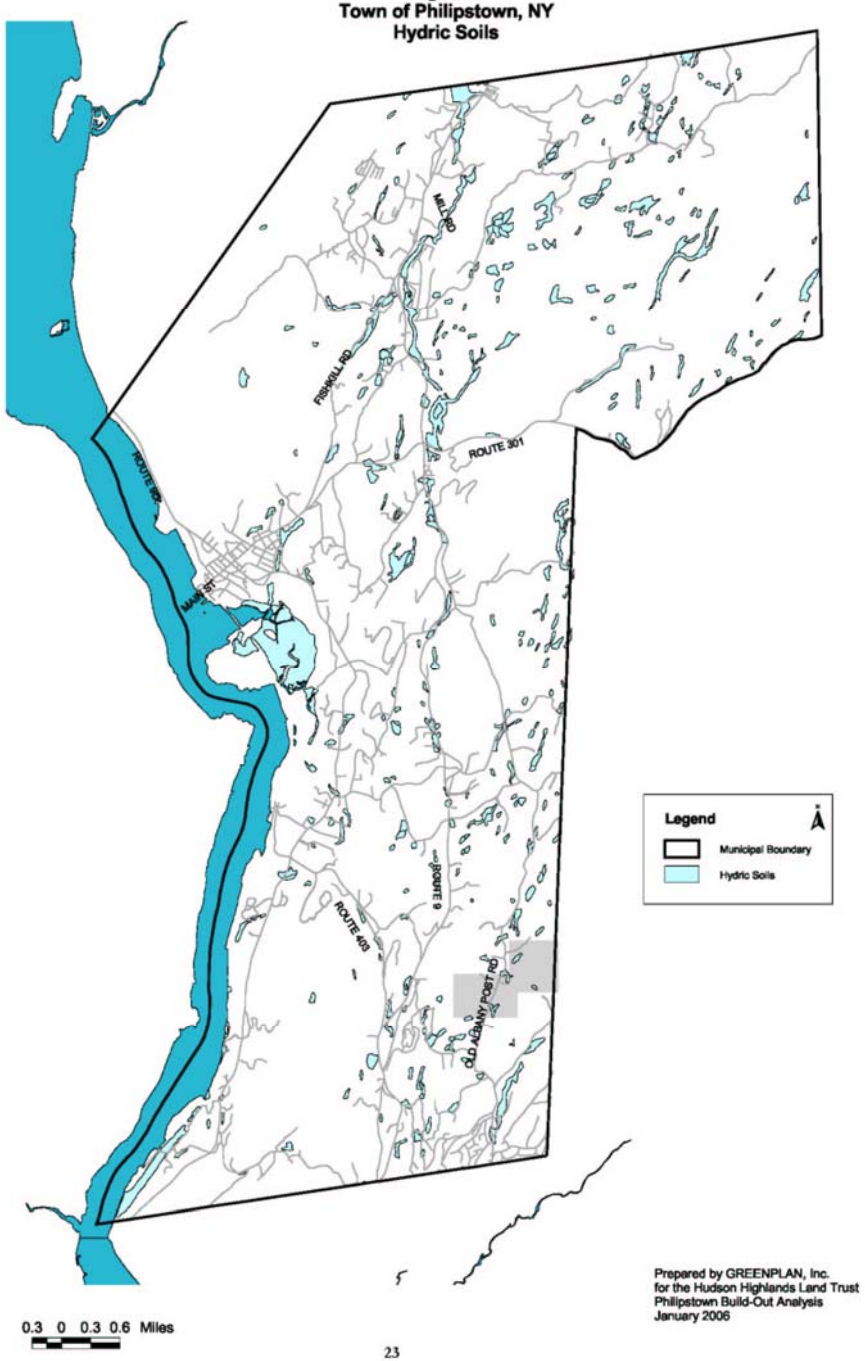

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Figure 4
Town of Philipstown, NY
Steep Slopes

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Steps in the process:

1. All constrained lands are subtracted from the Town's land area. The result is a "net usable land area".
2. Zoning and other assumptions are applied to the "net usable land area".

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Potential New Units

	< 2 acres		2 to 14 acres		15 to 42 acres		> 42 acres	
School District	Vacant	Under-Developed	Vacant	Under-Developed	Vacant	Under-Developed	Vacant	Under-Developed
Haldane	72	0	258	181	76	66	116	20
Garrison	59	0	228	202	52	69	63	24
Lakeland	140	3	24	24	36	6	13	4
Wappingers	0	0	6	1	8	3	0	0
Subtotal	271	3	516	408	172	144	192	48

1754 units + 26 Reserve Units = 1780 Total New Units

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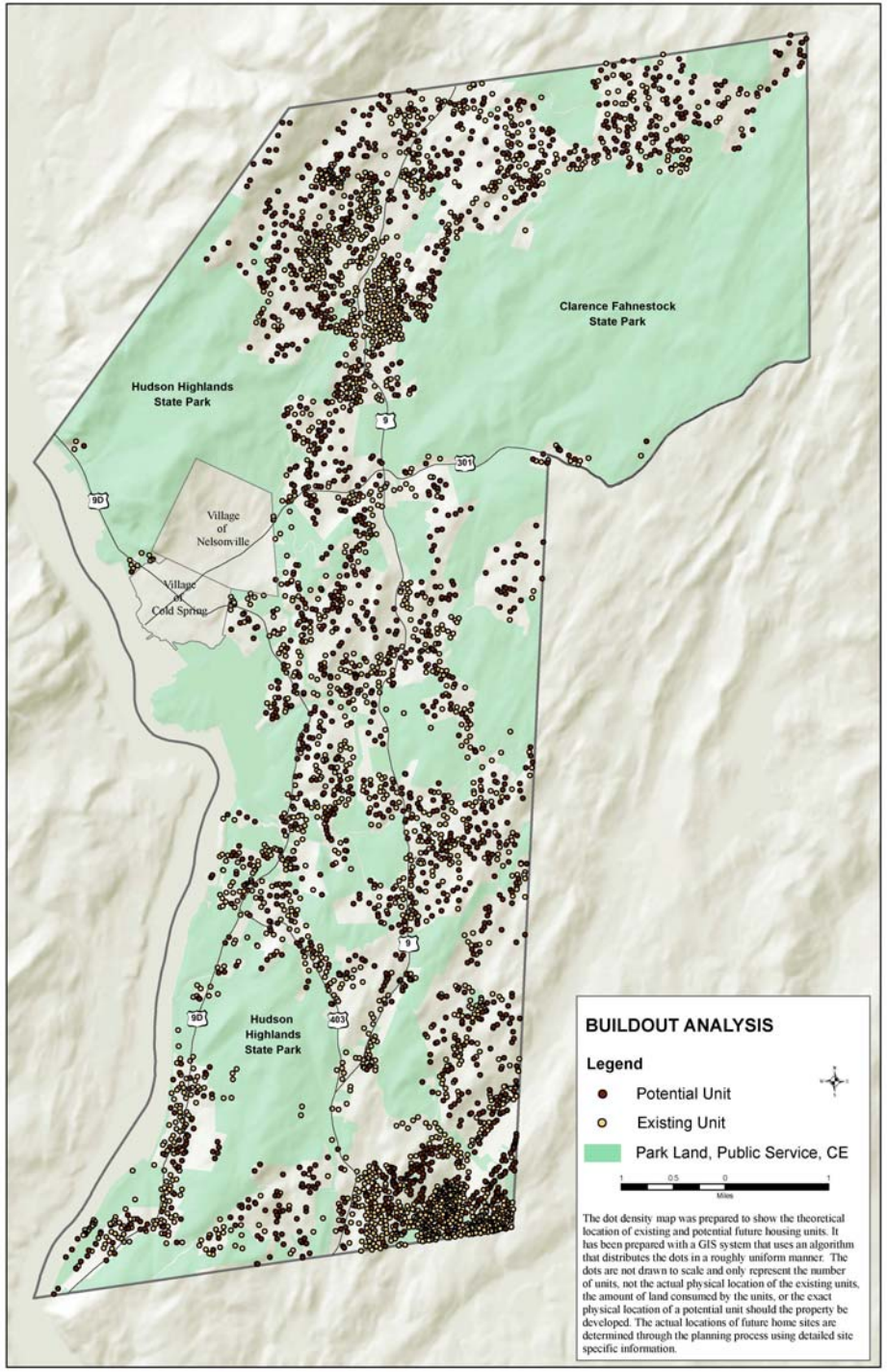
Clarence Fahnestock
State Park
Hudson Highlands
State Park
9
301
9D
Village
of
Nelsonville
Village
of
Cold Spring
9
9D
403
Hudson
Highlands
State Park
BUILDOUT ANALYSIS
Legend
Potential Unit
Existing Unit
Park Land, Public Service, CE
1
0.5
0
1
Miles
The dot density map was prepared to show the theoretical location of existing and potential future housing units. It has been prepared with a GIS system that uses an algorithm that distributes the dots in a roughly uniform manner. The dots are not drawn to scale and only represent the number of units, not the actual physical location of the existing units, the amount of land consumed by the units, or the exact physical location of a potential unit should the property be developed. The actual locations of future home sites are determined through the planning process using detailed site specific information.

Steps in the process:

1. All constrained lands are subtracted from the Town's land area. The result is a "net usable land area".
2. Protected lands are subtracted. Then existing zoning is applied to the "net usable land area" and subject to a "highest and best use" development scenario.
3. Estimate potential new dwelling units into trends like population growth, cost of community services, traffic, and infrastructure needs for the added population.

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Summary of Build-Out Impacts		
	Potential Impacts	Impact Factor
# of Developable Acres (DA)	7,426	
# of Existing Units	3,983	
# of New Units	1,780	
Additional Residents	4,557	2.56/unit
Additional School Age Children	1,507	.845/unit
Acres of Impervious Surface	743	10% * DA
Miles of New Private Roads	34	100 feet/unit
Additional Vehicles on Roads	3,560	2/unit
Additional Vehicle Trips/Day	16,999	9.55/unit
Additional Police Officers	5	1/1000 new population
Additional Fire Fighters	5	1/1000 new population
Additional Water Consumed (gpd)	676,400	380 gpd/unit
Additional Sewage Generated (gpd)	676,400	380 gpd/unit

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What is fiscal impact analysis?

The purpose of fiscal impact analysis is to estimate the impact of development or land use change on the costs and revenues of governments serving the development.

Mary Edwards, *Community Guide to Development Impact Analysis*.
University of Wisconsin.

It shows annual tax revenues and costs at the time of the build-out.

Estimated New Tax Revenues From Development	**MINUS** **-**	Estimated New Expenditures Required to Support Development	**EQUALS** **=**	Estimated Net Fiscal Impact of Development

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What can it tell us?

In general terms, how projected growth is likely to affect local governments' abilities to sustain current levels of taxes and spending.

What <u>can't</u> it tell us?

A precise picture of future taxes and spending.

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Assumptions – School Districts

- School per-pupil operating costs remain the same throughout the time of the build-out.
- The School tax rate remains the same throughout the time of the build-out.

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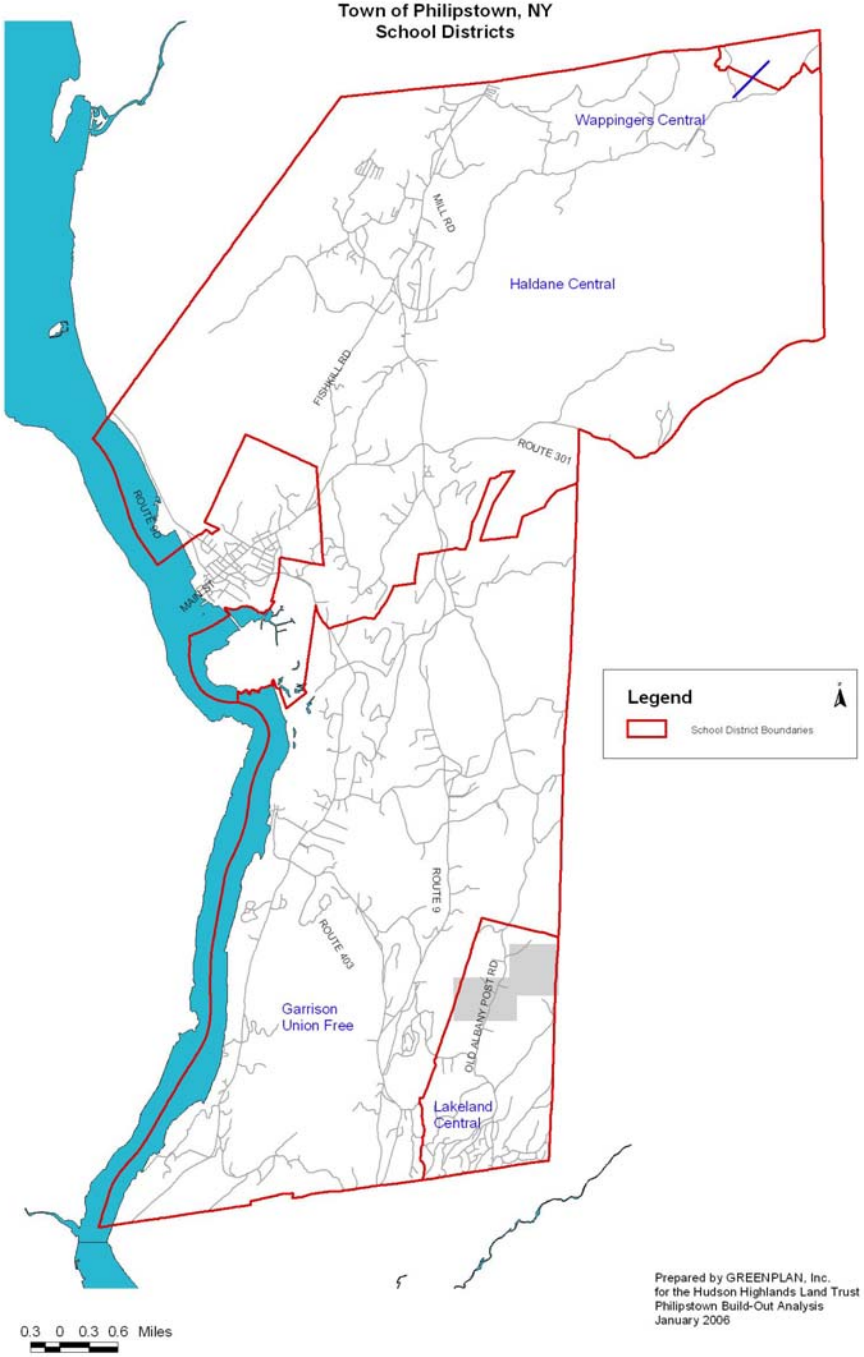
Figure 5
Town of Philipstown, NY
School Districts



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Summary of School Impacts

District	Existing Children	Total 2004-05 Budget	*Estimated New Children*	*Total Cost*	*Total Revenues*	*Net Impact*
Haldane	853	$14,566,935	670	$9,911,579	$6,089,492	($3,822,087)
Garrison	382	7,505,970	609	10,867,975	3,421,838	(7,446,137)
Lakeland	6,867	106,928,849	212	2,406,914	2,435,533	28,619
Wappingers	12,312	140,252,663	16	131,589	109,450	(22,139)
Total	**20,326**	**N/A**	**1,507**	**$23,318,057**	**$12,056,313**	**($11,261,744)**

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Build-out Conclusions:

Current Zoning Practices will increase population, including school-age children.

Increased population will potentially require greater expenditures from Town taxpayers to support additional services and school costs.

Traffic will increase on area roads and new roads will introduce additional impervious surfaces, a major cause of water pollution.

Philipstown can control its destiny by using “smart growth” techniques to minimize or avoid these effects.

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