

# Framework Principles & Concepts

Erie-Niagara Framework *for* Regional Growth



Final | 01.30.05

## INTRODUCTION

This paper provides statements of Principles for Growth and Development, a description of alternative regional development concepts, and an estimate of land requirements associated with each concept. A second paper, titled "Public Costs of Development Patterns" presents background information on methods to assess the fiscal impact of development and provides an estimate of public costs associated with each of the Concepts. These papers have been reviewed and approved by the Steering Committee and are available for review on the project web site.

Of the concepts described below, the Steering Committee identified the Reinvestment Concept as the one most closely representing their preferred future for the region's development. This concept, therefore, will serve as the basis for the development of Framework policies and strategies.

## PRINCIPLES

The Principles for Growth and Development are based on feedback from the initial round of interviews and focus group meetings, the Regional Dialogues, discussion during Steering Committee meetings, and the team's review of local and regional planning documents. These will serve as the foundation for Framework recommendations.

- ***Vital Centers.*** Improving the competitive position of the region's centers of commerce, industry and education is among the highest priorities of the Framework. The region's prosperity is dependent on the vitality and attractiveness of its downtowns and urban waterfronts, industrial and institutional districts, and emerging centers of employment and commerce.
- ***Livable Neighborhoods.*** To serve the increasingly diverse needs of the region's households, the Framework promotes efforts to improve the livability of the region's older neighborhoods and create more compact, walkable communities. Through reinvestment, infill, and more compact development, the region can accommodate anticipated growth on a smaller "footprint", slow the pace of rural land conversion, ease pressure on the road network, and lessen demand for new public infrastructure and facilities.
- ***Rural Communities.*** The Framework supports the stabilization and conservation of the region's rural communities by encouraging the revitalization and modest expansion of rural villages and hamlets; the conservation of agricultural lands; and the protection of sensitive scenic and natural areas, wildlife habitat, and open spaces.
- ***Natural Systems.*** The Framework encourages the conservation and protection of the region's most sensitive natural systems. The lakefront and escarpment; rivers, creeks, and streams; floodplains and riparian corridors; and forested lands are recognized as regionally significant resources worthy of protection and conservation.
- ***Regional Assets.*** The region's unique natural, historic, and cultural heritage represents an important though underappreciated asset. The Framework supports efforts to preserve historic sites and landscapes, conserve

and improve access (as appropriate) to natural systems and resources, interpret history, and celebrate regional culture.

- **Mobility & Accessibility.** The region's transportation infrastructure should be designed to promote reinvestment in developed areas, improve interstate and cross-border connectivity, strengthen alternative modes of transportation, and enhance the livability of neighborhoods. Development that supports transit use, walking, and more efficient commuting patterns are encouraged.
- **Public Systems & Services.** The location, quality and capacity of the region's public infrastructure and facilities has a powerful influence on the pattern and pace of development. The Framework supports public investment to maximize the use of existing infrastructure and facilities, improve the competitive position of underutilized lands and buildings, promote the reuse of brownfield and grayfield sites, and encourage the preservation and adaptive reuse of historic property.
- **Regional Stewardship.** The Framework recognizes as a liability the absence of a forum for addressing the pace and quality of regional development, the fiscal health of local governments, the efficiency and effectiveness of infrastructure investment, and the conservation of sensitive resources. Local governments; federal, state, and regional agencies and authorities; property owners and developers; interest groups; and residents are encouraged to work together to support actions consistent with the Framework.

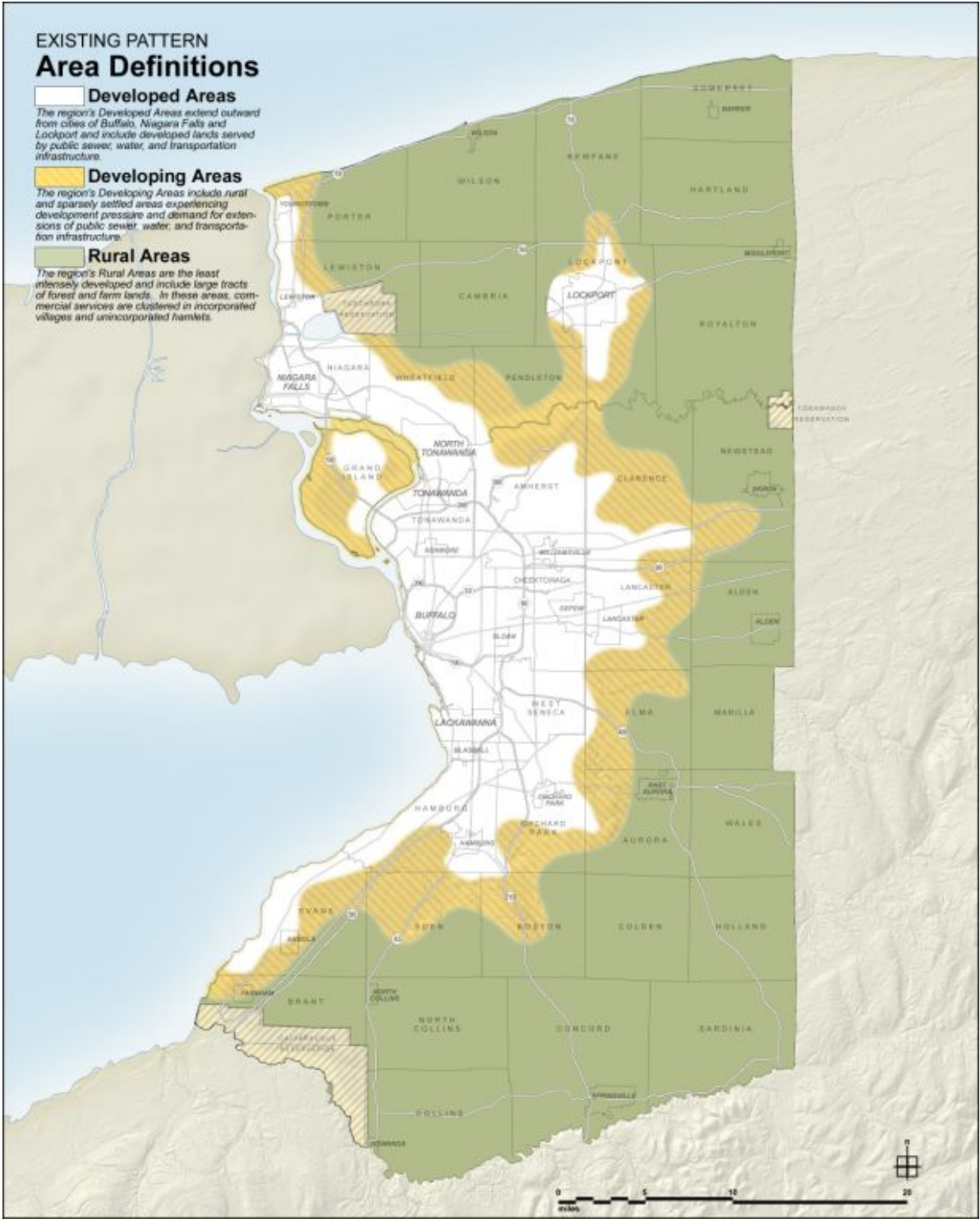
## DEVELOPMENT CONCEPTS

As called for in the scope of services, the team has defined three concepts illustrating alternatives for the region's growth and development to the year 2025—a Trend Concept, a Strategic Investment Concept, and a Reinvestment Concept. Each concept reflects different assumptions regarding the distribution and density of development among the following three areas:

- **Developed Area:** Areas of the region developed by 2000;
- **Developing Area:** Areas of the region on the immediate periphery of the Developed Area, portions of which have developed since 2000; and
- **Rural Area:** Areas of the region outside the Developed and Developing Areas.

As defined in the report *Growth & Development in the Erie-Niagara Region*, the Developed and Developing Areas "comprise the region's more intensely developed area, including those areas with urban services—public sewer and water—and ready access to the region's transportation network," and the Rural Area "includes the region's least intensely developed areas with large tracts of forested and farm lands." The maps on the following pages show the limits of each area.

As the basis for the concepts, the team has used GBNRTC's forecasts of population and households. These forecasts, developed and refined in collaboration with county and local officials, have served as the foundation for a range of local and regional planning studies, including the region's 2025 Long Range Transportation Plan and many local government comprehensive plans. GBNRTC's forecasts call for the region to add 58,553 households by 2025, an increase of 12% over the year 2000 or an average annual increase of 0.50%. According to the rationale provided in the 2025 Long Range Plan, the increase in households is based on projections that the region will reverse job and population losses experienced during the 1980s and 1990s and average household sizes will continue to modestly decline from 2.41 persons per household in 2000 to 2.34 in 2025.



Basing the concepts on different regional distributions and densities of households is recommended for several reasons. For regional analyses, households are a useful proxy for housing units—one household equals one occupied housing unit—and housing often is a leading indicator of shifts in a region’s pattern of commercial development. Commercial and industrial land uses not dependent on ready access to rail or highway, especially retail and office uses, tend to follow trends in housing development. As development economists often advise: “retail follows rooftops.” In addition, housing uses have much lower occupancy levels and much higher land consumption rates than commercial and industrial uses, thus making housing the central subject of many regional planning efforts. While a typical 10,000 square foot residential lot may generate two workers or 5,000 square feet of land per worker, only 1,000 square feet of land per worker may be required at the employment site.

### Regional Shifts in Households, 1980-2000

Between 1980 and 2000, the total number of households in the region increased by a little over 5%, from 445,951 to 468,831, with the region’s cities and older suburban communities losing households and more recently developed, developing, and rural areas experiencing significant increases.

Household Change by Area, 1980-2000

	1980 HH	2000 HH	Chg 1980-2000	
			#	%
<b>Developed Area</b>				
Erie County	325,699	330,480	4,781	1.47%
Niagara County	59,942	60,803	861	1.44%
<b>Subtotal</b>	<b>385,641</b>	<b>391,283</b>	<b>5,642</b>	<b>1.46%</b>
<b>Developing Area</b>				
Erie County	14,003	19,496	5,493	39.23%
Niagara County	7,006	10,525	3,519	50.23%
<b>Subtotal</b>	<b>21,009</b>	<b>30,021</b>	<b>9,012</b>	<b>42.90%</b>
<b>Rural Area</b>				
Erie County	25,460	30,897	5,437	21.36%
Niagara County	13,841	16,630	2,789	20.15%
<b>Subtotal</b>	<b>39,301</b>	<b>47,527</b>	<b>8,226</b>	<b>20.93%</b>
<b>TOTAL</b>	<b>445,951</b>	<b>468,831</b>	<b>22,880</b>	<b>5.13%</b>

Source: The HOK Planning Group, GBNRTC Forecasts of Population and Employment, 03.11.03.

### Review of Concepts

Three Concepts for regional growth, reinvestment, and development were prepared for review by the Steering Committee—a Trend Concept, a Strategic Investment Concept, and a Reinvestment Concept. The concepts represent three possible futures for the region based on assumptions regarding the regional distribution of households, the overall density of development, and the relative dispersal or concentration of development. As the concepts will be used to assess the implications of different regional development patterns, the total projected amount of regional growth is held constant.

## 2025 Development Concepts

<i>Concept</i>	<i>Development Pattern</i>	<i>Distribution of New Households by Area</i>	<i>Density of New Development by Area</i>	<i>Relative Concentration of Development</i>
Trend	Concept assumes the continuation of recent development trends. In Developed Areas, the concept assumes continued declines in older urban centers and new moderate density development in newer suburban areas with public sewer and water service. In Developing and Rural Areas, the concept assumes the continuation of low density, dispersed development resulting in the conversion of rural and agricultural lands and continued demand for extensions of public sewer, water, and transportation infrastructure.	25% Developed Area 40% Developing Area 35% Rural Area <i>(Distribution derived from analysis of 1980-2000 change in households)</i>	4 HH/a Developed Area 2HH/a Developing Area 0.5 HH/a Rural Area	Density assignments based on a review of development densities between 1980 and 2000 with highest densities achieved for infill projects in Developed Areas, lower average densities in the Developing Area, and very low densities in Rural Areas.
Strategic Investment	Concept assumes most new households would locate in the Developed and Developing Areas with 25% locating in Rural Areas. Concept assumes moderate density development in Developed Areas (areas currently served with public sewer, water, and transportation infrastructure). In the Developing Area, the concept assumes moderate density development resulting in the need for only modest extension of public sewer, water, and transportation infrastructure. In Rural Areas, the concept assumes a mix of 1) compact development in and around rural centers and 2) dispersed low density development requiring modest investment in public sewer, water and transportation infrastructure and modest disturbance of rural and agricultural lands.	50% Developed Area 25% Developing Area 25% Rural Area <i>(Distribution based on the average distribution under the Trend and Reinvestment Concepts)</i>	4 HH/a Developed Area 2HH/a Developing Area 0.5 HH/a Rural Area	Density assignments assume modest increases in densities in Developed Areas and Developing Areas and new housing in and around rural centers in Rural Areas.
Reinvestment	Concept assumes most new households would locate in existing Developed Areas with modest increases in Developing and Rural Areas. Concept assumes moderate density development in Developed Areas (areas currently served with public sewer, water and transportation infrastructure) and assumes development in Developing and Rural Areas occurs in and around areas with sewer and water service requiring minimal investment in infrastructure and minimal disturbance of rural and agricultural lands	70% Developed Area 15% Developing Area 15% Rural Area <i>(Derived from GBNRTC projections)</i>	6 HH/a Developed Area 4 HH/a Developing Area 2 HH/a Rural Area	Density assignments assume modest increases in densities in Developed and Developing Areas and concentration of new housing in and around rural centers in Rural Areas.

Source: The HOK Planning Group

Each 2025 development concept is based on a different spatial distribution of the same number of new households (58,681). The Trend Concept is based on an assumption that the distribution will follow the pattern experienced between 1980 and 2000. The Strategic Investment Concept is based on the average distribution under the Trend and Reinvestment Concept. The Reinvestment Concept generally follows the distribution employed by GBNRTC which calls for 70% of new households to locate in the Developed Area, 15% in the Developing Area, and 15% in the Rural Area.

A brief description of each concept follows.

**Trend Concept.** The Trend Concept calls for 75% of the region's new households to locate in the Developing and Rural Areas and the Developed Area to experience a net gain in households but a dramatic internal shift in from older urban centers to more recently developed suburban communities. The following table presents the household distribution for the Trend Concept.

**Household Distribution—Trend Concept**

	2000 Households		Trend Concept Households			
	2000 HH	Dist of Total HH	2025 HH	Change 2000-2025		Dist of Total HH
				#	%	
<b>Developed Area</b>						
Erie County	330,480		342,715	12,235	3.70%	
Niagara County	60,803		63,006	2,203	3.62%	
Subtotal	<b>391,283</b>	<b>83.46%</b>	<b>405,722</b>	<b>14,439</b>	<b>3.69%</b>	<b>76.92%</b>
<b>Developing Area</b>						
Erie County	19,496		33,553	14,057	72.10%	
Niagara County	10,525		19,531	9,006	85.56%	
Subtotal	<b>30,021</b>	<b>6.40%</b>	<b>53,084</b>	<b>23,063</b>	<b>76.82%</b>	<b>10.07%</b>
<b>Rural Area</b>						
Erie County	30,897		44,811	13,914	45.03%	
Niagara County	16,630		23,767	7,137	42.92%	
Subtotal	<b>47,527</b>	<b>10.14%</b>	<b>68,578</b>	<b>21,051</b>	<b>44.29%</b>	<b>13.01%</b>
<b>TOTAL</b>	<b>468,831</b>	<b>100.00%</b>	<b>527,512</b>	<b>58,553</b>	<b>12.49%</b>	<b>100.00%</b>

Source: The HOK Planning Group, GBNRTC Forecasts of Population and Employment, 03.11.03.

**Strategic Investment Concept.** The Strategic Investment Concept calls for the roughly even distribution of new households between the Developed Area and the Developing and Rural Areas. Under this concept, infrastructure extensions would be required to serve new development in Developing and Rural Areas but not to the extent required under the Trend Concept. The following table presents the household distribution for the Strategic Investment Concept.

Household Distribution—Strategic Investment Concept

	2000 Households		Strategic Investment Concept Households			
	2000 HH	Dist of Total HH	2025 HH	Change 2000-2025		Dist of Total HH
				#	%	
<b>Developed Area</b>						
Erie County	330,480		351,586	21,106	6.39%	
Niagara County	60,803		67,838	7,035	11.57%	
Subtotal	<b>391,283</b>	<b>83.46%</b>	<b>419,425</b>	<b>28,142</b>	<b>7.19%</b>	<b>79.51%</b>
<b>Developing Area</b>						
Erie County	19,496		31,229	11,733	60.18%	
Niagara County	10,525		14,436	3,911	37.16%	
Subtotal	<b>30,021</b>	<b>6.40%</b>	<b>45,665</b>	<b>15,644</b>	<b>52.11%</b>	<b>8.66%</b>
<b>Rural Area</b>						
Erie County	30,897		41,973	11,076	35.85%	
Niagara County	16,630		20,322	3,692	22.20%	
Subtotal	<b>47,527</b>	<b>10.14%</b>	<b>62,295</b>	<b>14,768</b>	<b>31.07%</b>	<b>11.81%</b>
<b>TOTAL</b>	<b>468,831</b>	<b>100.00%</b>	<b>527,384</b>	<b>58,553</b>	<b>12.49%</b>	<b>100.00%</b>

Source: The HOK Planning Group, GBNRTC Forecasts of Population and Employment, 03.11.03.

**Reinvestment Concept.** The Reinvestment Concept calls for most of the new households to locate in the developed area with older urban center and existing suburban communities experiencing significant levels of investment. The household distribution called for under this concept follows the allocations used by GBNRTC in their regional forecasts. The following table presents the household distribution for the Strategic Investment Concept.

Household Distribution—Reinvestment Concept

	2000 Households		Reinvestment Concept Households			
	2000 HH	Dist of Total HH	2025 HH	Change 2000-2025		Dist of Total HH
				#	%	
<b>Developed Area</b>						
Erie County	330,480		367,635	37,155	11.24%	
Niagara County	60,803		65,493	4,690	7.71%	
Subtotal	<b>391,283</b>	<b>83.46%</b>	<b>433,128</b>	<b>41,845</b>	<b>10.69%</b>	<b>82.13%</b>
<b>Developing Area</b>						
Erie County	19,496		24,461	4,965	25.47%	
Niagara County	10,525		13,784	3,259	30.97%	
Subtotal	<b>30,021</b>	<b>6.40%</b>	<b>38,245</b>	<b>8,224</b>	<b>27.40%</b>	<b>7.25%</b>
<b>Rural Area</b>						
Erie County	30,897		37,204	6,307	20.41%	
Niagara County	16,630		18,807	2,177	13.09%	
Subtotal	<b>47,527</b>	<b>10.14%</b>	<b>56,011</b>	<b>8,484</b>	<b>17.85%</b>	<b>10.62%</b>
<b>TOTAL</b>	<b>468,831</b>	<b>100.00%</b>	<b>527,384</b>	<b>58,553</b>	<b>55.94%</b>	<b>100.00%</b>

Source: The HOK Planning Group, GBNRTC Forecasts of Population and Employment, 03.11.03.

## Density Assignments & Land Area Requirements

Once the regional distribution was established, density factors (expressed as households per acre or HH/a) were applied to determine land area requirements. For each concept it was assumed that the density of new households would be highest in the Developed Area and lowest in Rural Area, with the highest overall densities assigned for the Reinvestment Concept and the lowest for the Trend Concept. (Refer to the 2025 Development Concepts table for a summary of assumptions regarding the relative concentration of development for each concept.) This exercise resulted in projections of demand for 57,000 acres of land under the Trend Concept, 23,000 acres under the Strategic Investment Concept, and 13,000 acres under the Reinvestment Concept.

A summary of the density assignments and resultant land requirements is provided in the following table.

### Density Assignments & Land Area Requirements for the 2025 Concepts

	Trend Concept			Strategic Investment Concept			Reinvestment Concept		
	New Households 2000-2025	Density Factor (HH/acre)	Land Need (acres)	New Households 2000-2025	Density Factor (HH/acre)	Land Need (acres)	New Households 2000-2025	Density Factor (HH/acre)	Land Need (acres)
<b>Developed Area</b>									
Erie County	12,235	4.00	3,059	21,106	6.00	3,518	37,155	6.00	6,193
Niagara County	2,203	4.00	551	7,035	6.00	1,173	4,690	6.00	782
Subtotal	<b>14,439</b>		<b>3,610</b>	<b>28,142</b>		<b>4,690</b>	<b>41,845</b>		<b>6,974</b>
<b>Developing Area</b>									
Erie County	14,057	2.00	7,029	11,733	4.00	2,933	4,965	4.00	1,241
Niagara County	9,006	2.00	4,503	3,911	4.00	978	3,259	4.00	815
Subtotal	<b>23,063</b>		<b>11,531</b>	<b>15,644</b>		<b>3,911</b>	<b>8,224</b>		<b>2,056</b>
<b>Rural Area</b>									
Erie County	13,914	0.50	27,828	11,076	1.00	11,076	6,307	2.00	3,154
Niagara County	7,137	0.50	14,275	3,692	1.00	3,692	2,177	2.00	1,088
Subtotal	<b>21,051</b>		<b>42,103</b>	<b>14,768</b>		<b>14,768</b>	<b>8,484</b>		<b>4,242</b>
<b>TOTAL</b>	<b>58,553</b>		<b>57,244</b>	<b>58,553</b>		<b>23,369</b>	<b>58,553</b>		<b>13,272</b>

Source: The HOK Planning Group, GBNRTC Forecasts of Population and Employment, 03.11.03.