

# BERKSHIRE PLANNING TOOLS



One in a series of “toolbox” items to accompany the Regional Plan for the Berkshires

June 2001

## How to Read a Buildout analysis

*As part of its Community Preservation Initiative, the Massachusetts Executive Office of Environmental Affairs (EOEA) contracted with the Berkshire Regional Planning Commission (BRPC) to develop buildout analyses for each of the 32 towns in the Berkshires. Buildout analyses for Lenox, Stockbridge, Dalton and North Adams were completed in the spring of 1999 as part of a statewide pilot program, while the remaining Berkshire communities were completed in Fall 2000.*

### What is a Buildout Analysis?

A Buildout Analysis is a broad estimate of the maximum development that could occur in a community based on current zoning and environmental constraints. The analysis consists of a series of maps showing current zoning, environmental constraints to development and land that is available and suitable for development. The acreage of developable land is determined and calculations are made to estimate the number of potential homes that could be developed in each residential zoning district. The analysis can also include a projection of the amount of commercial and industrial floor space that could reasonably be built in non-residential districts. This information is used to estimate future demands on public infrastructure and the environment, including water use, municipal solid waste, school enrollment, and transportation.

All Berkshire communities have received their maps, both in wall map and digital versions.

### What is the Value of a Buildout Analysis to Berkshire Communities?

The Buildout Analysis provides a community with a model that shows the amount of development its zoning bylaws are programmed to produce. It is a tool designed to stimulate discussion about planning and the need to guide change. The buildout process is meant to form the basis from which a community’s vision for the future would emerge. The buildout is an aid to local planners for taking a proactive approach to economic development, fiscal management, land use planning and environmental protection. In more practical terms, the buildout analysis:

- Provides an integral component to the development of a Comprehensive Master Plan or an Open Space and Recreation Plan;
- Can be useful to help a community compare its goals for the future with the growth its regulations may produce;
- Can be used to re-evaluate and amend current zoning and land use regulations;
- When combined with other communities, provides a tool for regional and statewide land use planning.

Through this process, BRPC hopes that communities will re-evaluate current zoning and land use regulations and take a proactive

approach to planning. Currently, state funds are available to do just this.

### **Steps Taken to Complete the Buildout Analysis**

Staff from BRPC visited each community to gather data and with assistance from the planning boards refined that data. Communities were presented with their buildout maps in the fall of 2000. In addition, the following was completed:

1. Current zoning, subdivision, wetlands, flood zone and any other relevant regulations were reviewed and summarized.
2. Maps of current land use, environmental constraints (steep slopes, wetlands, flood hazard areas, etc.), and permanently protected open space were presented to the community for review and updating.
3. The revised information from the maps was inputted into a Geographic Information System (GIS), which is used to determine the acreage of potentially developable land for each zoning district.
4. Calculations were performed to estimate the potential number of building lots, dwelling units and commercial/industrial floor space possible for each zoning district. Additional calculations were performed to estimate future water demand, municipal solid waste, number of new students in school, and new subdivision roads.

### **Understanding and Interpreting the Buildout Maps and Analysis**

Though the numbers generated through the buildout analysis may seem extremely high and unlikely ever to be met, the fact is that *these numbers are estimates of what current zoning will allow in your community.* In a sense, this

was the idea...to alert communities to the potential for future development. In the words of the Massachusetts Executive Office of Environmental Affairs (EOEA) Secretary Bob Durand, "These analyses will be used to help cities and towns chart their future growth patterns proactively in order to protect the unique characters of their communities."

Each GIS map illustrates a different aspect of development potential and constraints. These maps function as a series of layers of information; together they make up a composite picture of how current conditions and regulations might affect future development.

#### **MAP 1: Zoning and Absolute Constraints**

##### ***What the map shows:***

Land that is already developed or absolutely constrained appears in color. Colors indicate different types of constraints, such as permanent open space restrictions and environmental regulations. Different colors are also used to represent land that is already developed, and other lands unavailable for development, e.g. utility corridors.

Land that is left white is available for growth and development subject to community zoning and other development regulations.

##### ***What it tells you:***

- Which land is already developed or protected.
- The relative proportion of land zoned for residential vs. land zoned for commercial uses.
- Where recent (e.g., in the last ten years) development has been occurring.

#### **MAP 2: Developable Land and Partial Constraints**

##### ***What the map shows:***

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Developable land is shown in color. Colors indicate different land uses permitted by zoning (residential, commercial, industrial, etc.). Another layer of information (lines and bars) illustrates partial constraints arising from environmental protection and other considerations (partial constraints include slopes 15-25%, river protection areas, wetland buffers, and 100-year floodplain).

Accompanying Map 2 is a spreadsheet analyzing how many additional housing units and how much commercial/industrial space could be developed, based on current zoning.

### ***What it tells you:***

- Which land has development potential and how much development can take place.
- The relative proportion of land currently available for new housing vs. land available for new commercial uses.

### **MAP 2A: Developable Land**

#### ***What the map shows:***

Identical to Map 2 with the addition of soils unsuitable for on-site septic shown as a partial constraint. *Map 2A was generated specifically for the Berkshire region because of the constraints that soils pose to suitability for subsurface sewage disposal systems.*

#### ***What it tells you:***

- Gives a general idea of soils as a partial constraint in the rural communities that are not serviced by a municipal sewer system. It should be noted that mapped soils data is extremely general in nature and on-site soils investigation is necessary to determine suitability for development.

### **MAP 3: A simplified composite of Map 1 and Map 2**

#### ***What the map shows:***

Developable land is shown in purple. Land that is partially constrained is shown in a red stipple pattern. Land that is unavailable for new growth due to existing development, permanently protected lands, or lands unavailable due to regulations are shown in yellow.

#### ***What it tells you:***

- Location of undeveloped pockets within developed area that might be targeted for new public open space or infill development.
- Is development occurring where it makes sense (i.e. adjacent to existing development, where infrastructure is available, etc.)?

### **MAP 4: Aerial Orthophotographic Image**

#### ***What the map shows:***

An aerial photograph of your community, corrected for distortion, showing recent conditions at the same scale as the GIS maps. Aerial photographs were taken in 1997.

#### ***What it tells you:***

- This picture translates the abstractions of the maps into reality.
- The actual texture, character, and quality of both developed and undeveloped land in your community.



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### Potentially Developable Land in the Berkshire Region

| <i>City/Town</i>     | <i>Developable Land Area** (acres)</i> | <i>Potential Dwelling Units</i> | <i>Potential Add'l. Residents</i> |
|----------------------|--|---------------------------------|-----------------------------------|
| Adams                | 2,913                                  | 4,518                           | 10,031                            |
| Alford               | 3,395                                  | 1,697                           | 4,210                             |
| Becket               | 13,798                                 | 6,945                           | 19,307                            |
| Cheshire             | 3,503                                  | 2,329                           | 6,080                             |
| Clarksburg           | 1,988                                  | 1,084                           | 2,798                             |
| Dalton               | 3,442                                  | 1,908                           | 5,724                             |
| Egremont             | 5,957                                  | 4,885                           | 11,284                            |
| Florida              | 4,338                                  | 2,169                           | 5,856                             |
| Great Barrington     | 7,811                                  | 12,314                          | 29,184                            |
| Hancock              | 3,188                                  | 3,188                           | 7,875                             |
| Hinsdale             | 5,630                                  | 2,387                           | 6,039                             |
| Lanesborough         | 5,952                                  | 3,738                           | 9,531                             |
| Lee                  | 5,071                                  | 3,813                           | 9,419                             |
| Lenox                | 3,482                                  | 4,426                           | 10,445                            |
| Monterey             | 5,869                                  | 2,914                           | 6,672                             |
| Mount Washington     | 3,858                                  | 1,119                           | 2,472                             |
| New Ashford          | 2,222                                  | 1,043                           | 2,723                             |
| New Marlborough      | 14,170                                 | 14,028                          | 34,510                            |
| North Adams          | 2,665                                  | 6,102                           | 13,974                            |
| Otis                 | 10,712                                 | 10,672                          | 27,642                            |
| Peru                 | 6,111                                  | 3,056                           | 8,556                             |
| Pittsfield           | 7,367                                  | 17,398                          | 42,891                            |
| Richmond             | 5,693                                  | 2,283                           | 5,937                             |
| Sandisfield          | 14,018                                 | 14,018                          | 36,167                            |
| Savoy                | 6,954                                  | 2,318                           | 6,027                             |
| Sheffield            | 11,062                                 | 10,523                          | 25,465                            |
| Stockbridge          | 8,426                                  | 3,215                           | 6,591                             |
| Tyringham            | 4,306                                  | 4,306                           | 10,722                            |
| Washington           | 4,982                                  | 1,245                           | 3,450                             |
| West Stockbridge     | 4,568                                  | 1,874                           | 4,309                             |
| Williamstown         | 4,058                                  | 4,682                           | 12,311                            |
| Windsor              | 8,450                                  | 2,817                           | 7,577                             |
| <b>COUNTY TOTALS</b> | <b>195,959</b>                         | <b>159,014</b>                  | <b>395,779</b>                    |

*Composite Build Out Map for the Berkshire region, showing developable lands in black*

#### **REGIONAL BUILD OUT SUMMARY**

|                                |                     |
|--------------------------------|---------------------|
| TOT. COUNTY ACREAGE            | <i>605,437ac.</i>   |
| TOT. DEVELOPABLE LAND          | <i>299,517 ac.*</i> |
| <b>% OF COUNTY DEVELOPABLE</b> | <b>49%</b>          |

*\* after reductions for protected open space, existing developed land, and land with complete restraints*

*\*\* after reductions for protected open space, existing developed land, and land with complete and partial constraints*

*This publication is one in a series of “toolbox” items to support the Regional Plan for the Berkshires. If you would like to receive additional copies of this or other toolbox items, please contact the Berkshire Regional Planning Commission, 33 Dunham Mall, Pittsfield, MA 01201 or call (413) 442-1521. Copies of the toolbox items are also available on the web. Visit [www.berkshireplanning.org](http://www.berkshireplanning.org)*

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