



## Build Out Analysis

A build out analysis is often used by towns to test existing regulations and to estimate what the future might bring when all land is developed to the maximum extent allowed. A build out analysis can help towns see the future although the time frame for the future may be guess work. A build out analysis helps a town evaluate its current situation and possible future development patterns.

### Goal

The goal of Build-Out analysis is to estimate how much development potential the town has, given existing land use laws and regulations. A build out analysis will show where growth can occur on undeveloped land as well as on developed land that may not be developed to its fullest potential.

The steps to complete a build out analysis are simple and the tools are few.

### Tools

According to the DEP web site, the following tools are needed to do a Build Out Analysis:

- Base maps showing
  - Perimeter of the town
  - North arrow
  - Scale of map
  - Existing roads
  - Surface waters (lakes, rivers, streams)
  - Utility Easements
  - Floodplains
  - Steep Slopes (not including slopes that can be graded into developable land)
  - Land with restricted public ownership or conservation easements that are permanently protected from development
- Overlay maps showing
  - Developed land with homes, commercial buildings, schools, churches, industrial facilities, etc. showing lot lines and existing structures.
  - Present zoning delineations, if existing, showing residential, commercial, industrial zones.
  - Undeveloped land that may be developed



## **Process**

For undeveloped land, each lot or parcel should be “loaded” to its fullest allowable development potential. This includes, residential uses, commercial and industrial uses. If a large lot can be subdivided into numerous parcels or if it can accommodate numerous multi-family units, you should assume that level of development. Do not take into account environmental, economic or quality of life issues.

- Remove land that will be attributable to streets: 15% is a conservative estimate.
- Remove land that is undevelopable such as surface waters, wetlands, permanently protected land and steep slopes.
- Remove land that codes require to be green. For instance, some local codes have a 50% coverage ratio, or a 75% coverage ratio which does not allow building on the entire lot.

For developed land, the same reductions should be made as for undeveloped land but additional determinations must be made:

- How is the land zoned? If residential uses sit on commercial land, assume commercial uses as a possibility.
- Can the land be subdivided? A 10 acre lot in 2 acre zone could be subdivided and this potential should be determined.
- Can the buildings be enlarged? If codes allow a greater building size, or greater lot coverage, assume that maximum build out in square footage.
- Can a home be converted to multifamily units? Can an in-law apartment or accessory unit be added? Assume this possibility.
- Can a home be converted to a higher residential use such as a dormitory (if appropriate) or student or elderly housing? If so, assume this possibility.
- Can a home be converted to an industrial or commercial use, assume that possibility. Possibilities include restaurants, inns, bed and breakfasts, hospital or medical facility, offices, etc.
- Can a business be expanded in size or in use? For instance, can a business add a second floor, more hours of operation, or a drive through operation? If so, assume that possibility.

## **Grandfathering**

A build out analysis must take into account any grandfathering of land uses that have occurred before any regulations went into effect. If a use was permitted, it must be assumed to continue.



### **Adjacent parcels**

Sometimes, a small parcel (conforming to lot size or not) might be combined with an adjacent parcel to enlarge significantly. An example might be a small store combining with an adjacent parcel to build a superstore. This potential should be assumed.

### **Other issues**

- Consider allowable building heights. Remember that second and third floors can add retail/office or residential space.
- Pay attention to land that is required for off-street parking spaces. How much parking is required for each commercial and residential unit? Remember, required off-street parking areas are not buildable areas, unless of course, subsurface parking is allowed.

### **Analyzing the Impact**

When the Build Out analysis is completed, the result can be a set of maps with various dots that indicate where residential, commercial and industrial growth will occur. This map can be quite effective in helping people to see the growth that can occur under existing regulations. It also prompts people to ask whether this is where they want the growth to occur.

Build out analysis should also produce a projected number of units, and a projected square footage of additional commercial and industrial space. Again, the location and timing of this growth is a question for the people in the town to decide.

A final set of questions is also important to answer:

- What is the impact on open space and farmland?
- What is the impact on the school system, classrooms and school busing?
- What is the traffic impact?
- What is the impact on other local services such as police, fire, water, sewerage, electrical production and schools?
- What is the impact on impermeable surfaces and runoff?
- What is the tax revenue impact?

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*“A grassroots initiative for sensible growth.”*



### **Assumptions**

Build out analysis does not make any assumptions about the economy or the political changes that may occur. It simply takes a look at the “worst case” under existing land use laws or regulations. Certainly, development will be phased due to many factors including the economic climate, the environmental impacts, or the political changes that may affect development rates and numbers. These factors will all affect the final results of how much and where development will occur. The value of build out analysis is that it gives community members a look at the consequences of build out under existing regulations and helps them make better decisions about the future.

### **Resources**

There are a number of resources towns can call on in doing Build Out Analysis. These include the following:

- The US Department of Environmental Protection, Green Communities ([www.epa.gov/greenkit/build\\_out.htm](http://www.epa.gov/greenkit/build_out.htm))
- Regional Planning Commissions
- Randall Arendt’s book “Growing Greener”
- Friends of Midcoast Maine