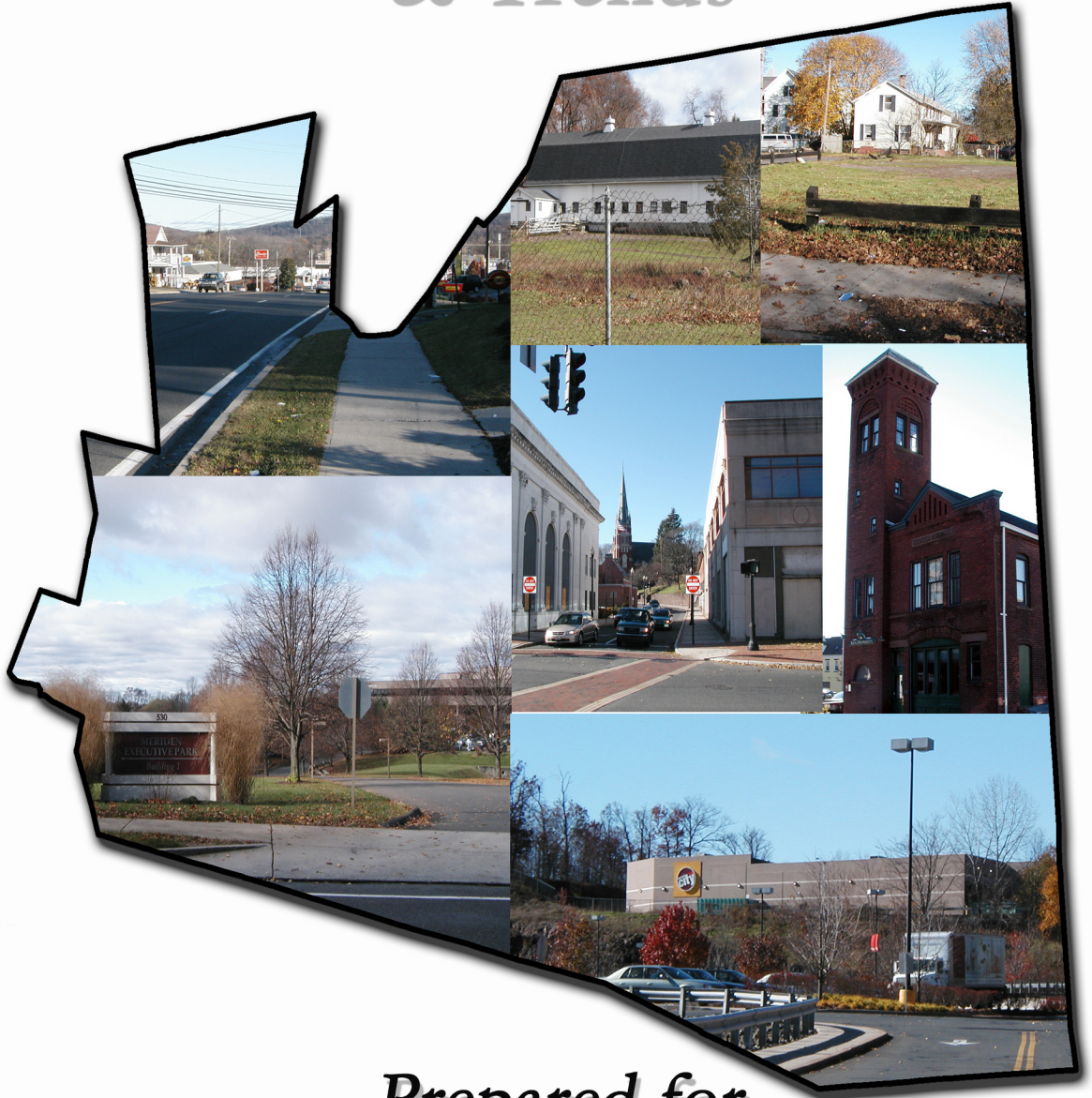


# *Plan of Conservation and Development*

## *Development Patterns & Trends*



*Prepared for  
City of Meriden  
Planning Commission*

*May 2007*

**CITY OF MERIDEN**

**PLAN OF CONSERVATION  
&  
DEVELOPMENT**

**Development Patterns &  
Trends**

**May 2007**

**Prepared For:  
City of Meriden  
Planning Commission**

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## I. INTRODUCTION

Understanding the existing land use patterns of the City is an important component to the Plan of Conservation and Development. Knowledge of where specific types of uses are located, particularly on a parcel basis, can help local officials identify areas that may have potential for economic development or open space protection. This memorandum describes in detail the existing land use composition of Meriden. In addition, detailed land use maps showing existing land use, potential development constraints, existing zoning, etc. have been prepared on a city-wide basis. An analysis that assesses the City's capacity to accommodate new development is also provided. This report is not an endorsement of the level or type of future land use development; it is a planning tool that will be used to help formulate the final Plan of Conservation and Development.

## II. LAND USE PATTERNS

The City of Meriden has a total area of approximately 15,360 acres or 24 square miles. Meriden contains a variety of land uses including industrial, commercial, residential, institutional, and open space. Because of the City's proximity between New Haven and Hartford and Interstate 91, Interstate 691, and Route 15 transportation corridors, Meriden has become more heavily developed through the years.

As part of the study of existing land use and development potential, an analysis was prepared based on the City's digital parcel base map. Meriden's land records are incorporated into this parcel base map so that information such as land use, zoning, property assessment value (land and building) can be displayed and analyzed on a city wide, parcel-by-parcel basis. While utilizing detailed

information of this type for quantifying land use patterns and estimating development potential is more accurate than methods used in the past, it is important to recognize that the purpose of this study is to provide a generalized assessment of land use patterns and development potential as a guide for planning purposes. These planning purposes are to describe Meriden in terms of general land use characteristics and indicate growth trends and potential for the future.

### Land Use Assessment

In order to accurately assess the composition and distribution of the City's land use categories, a current digital land use map of Meriden was utilized. The existing digital base map and corresponding property records from the assessor's database, resulted in a detailed *Existing Land Use Map* and inventory for all parcels within the City.

Table 1 below describes the distribution and comparison of land amongst the major land use categories reported in 1981.

<b>Land Use Category</b>	<b>Area (Acres)</b>	<b>Percent of City's Land Area</b>
Residential	4,800	31.6%
Commercial	525	3.5%
Industrial	400	2.6%
Public Institutional	800	5.3%
Parks & Open Space	2400	15.8%
ROW's	1950	12.9%
Undeveloped Land	4,300	28.3%

*Source: 1985 Land Use Plan.*

An updated 2007 land use inventory has been compiled. Table 2 provides a summary of the major land use categories and a calculation of percent change since the 1981 land use

Land Use Category	Area (Acres)	Percent of City's Land Area	Percent Change 1981-2007 <sup>(1)</sup>
Residential	6,212	40.4%	29.4%
Commercial	815	5.3%	55.2%
Industrial	701	4.6%	75.3%
Public Institutional / Infrastructure	1,187	7.7%	48.4%
Parks & Open Space	2,185	14.2%	-9.0%
ROW's	2,102	13.7%	7.8%
Undeveloped Land <sup>(2)</sup>	2,157	14.0%	-49.8%

Source: Tax Assessor Database 2006

<sup>(1)</sup> Based on 1985 Land Use Plan & 2007 Land Use Inventory

<sup>(2)</sup> Aggregate of Vacant & Agricultural Lands.

inventory. Table 3 on the following page provides a more detailed breakout of the existing land uses in the City, which are also illustrated on the map titled *Existing Land Use*. Although it is recognized that some differences in inventory methodology and categorization of land uses between 1981 and 2007 exist, it is helpful to compare land use characteristics between decades in order to identify general trends in land development.

Because of the differences in source data and methodology, we hesitate to quote specific growth statistics based on the 1981 and 2007 studies, which may or may not be directly comparable.

Nevertheless, Meriden has continued to develop and mature as a community in all respects particularly in the industrial, commercial, and residential categories, which experienced growth of 75.3%, 55.2%, and 29.4% while undeveloped lands experienced a decrease of 48.6%. The top three land use categories in 2007 are Residential at 40.4%, Open Land at 28.3%, and Institutional /Infrastructure at 21.4%. In total, approximately 72% of the land within the City is in a developed category (Table 3).

**Table 3  
Meriden 2007 POCD Existing Land Use**

Residential			Institutional / Infrastructure		
Land Use	Acres	Percentage	Land Use	Acres	Percentage
Residential: Single Family	5,103.11	33.2%	Public Service	134.33	0.87%
Residential: Two Family	375.23	2.4%	Public Infrastructure	216.95	1.41%
Residential: Three Family	124.44	0.8%	Educational Facilities	256.68	1.67%
Residential: Multi-Family	608.73	4.0%	Private Institutional	467.95	3.05%
Residential: Trailer Park	0.79	0.0%	Misc. State Property	111.95	0.73%
<b>Total:</b>	<b>6,212.29</b>	<b>40.4%</b>	ROW*	2,101.55	13.68%
<b>Commercial</b>			<b>Total: 3,289.41 21.4%</b>		
Land Use	Acres	Percentage	Open Land**		
Commercial: Automotive	71.46	0.5%	Land Use	Acres	Percentage
Commercial: General	123.55	0.8%	Open Space: Developed Park	438.15	2.9%
Commercial: Office	313.11	2.0%	Open Space: Natural Area	1,692.62	11.0%
Commercial: Retail & Food Service	307.16	2.0%	Open Space: Private / Semi-Private	53.40	0.3%
<b>Total:</b>	<b>815.28</b>	<b>5.3%</b>	Agricultural	398.98	2.6%
<b>Industrial</b>			Vacant Land	1,233.22	8.0%
Land Use	Acres	Percentage	Municipal: Vacant Land	525.30	3.4%
Industrial: Quarry / Gravel Processing	201.74	1.3%	<b>Total:</b>	<b>4,341.67</b>	<b>28.3%</b>
Industrial: Warehouse/Storage	142.31	0.9%	<b>Total Acreage of City: 15,360</b>		
Industrial: Manufacturing	357.32	2.3%	* Includes Public, Private, and Rail ROW's.		
<b>Total:</b>	<b>701.37</b>	<b>4.6%</b>	**Open Land includes open space and other undeveloped land categories.		

### **Open Land**

The City has 2,184.2 acres designated as open space, comprised of 1,692.6 acres of natural areas, 438.15 acres of developed parks, and 53.4 acres of private open space. The open space category represents land used for active and passive recreation and illustrates areas generally protected from future development. At 14.2% of the City's area it fails to meet the State's goal of 20% for Open Space.

The 1985 Land Use Plan reported that in 1981, the City contained approximately 4,300 acres of undeveloped land or 28.3% of the City and by 2007 the total decreased to approximately 2,157 acres of undeveloped land or 14.0%. With only 1,758.5 acres of vacant land and 399 acres of agricultural lands, a limited amount of future development can be anticipated to occur on raw vacant lots. It should also be noted that this vacant land calculation fails to take into account the physical development constraints such as wetlands, floodplains, and steep slopes that will further reduce the amount of developable land. Due to the limited amount of raw vacant land, it is clear that reuse, redevelopment, and/or subdividing of existing property will play an increasingly critical role in the City's future development.

As stated before, the declining amount of vacant land in the City indicates that future growth especially in core areas of the City will likely involve "infill" development projects to fill in the gaps of the existing land use pattern. In addition, it is likely that many of the new commercial developments that will occur in Meriden over the decade or so are likely to involve redevelopment projects, or conversion of old and abandoned land uses and brownfields into new redefined development projects. Evidence of this trend can already be seen with the City focusing on redevelopment for the Hub Site, the Undercliff Property, Factory H, the VMMC (former hospital) site and land assemblage and

"infill" of the areas around the Chamberlain Highway-Kensington Avenue corridor. The distribution of the City's remaining vacant land is illustrated on the map titled *Vacant and Agricultural Land*.

### **Commercial / Industrial**

From 1981 to 2007 commercial land and industrial land both experienced significant growth of 55.5% (from 525 to 815 acres) and 75.3% (from 400 to 701 acres) respectively. Despite this growth over the last several decades, for a city of Meriden's size and maturity, a relatively small percentage of land (1,516.7 acres or 9.9% of the total land area) is categorized as a commercial or industrial use. In comparison, the percentage of land used for commercial or industrial purposes in some other communities are: New Haven, 11%; North Haven, 12%; West Haven, 12%; Milford 14.9%; East Hartford, 13.9%; Bristol, 7.2%; and Hamden, with only 5.6%<sup>1</sup>. Commercial land is densely clustered in both the main east/west (East/West Main St.) and north/south (Colony Road and Research Parkway) transportation corridors creating the perception that the City is much more commercially and industrially developed than in fact it is. Of all the parcels with frontage along the 4.1 mile stretch of Main Street from Pomeroy Avenue to Allen Avenue, parcels with a commercial or industrial use account for over 67% of the total land.

### **Institutional / Infrastructure**

Meriden has 3,289.4 acres or 21.4% of its land categorized as institutional/infrastructure. Of the 3,289.4 acres in this category, 2,101.6 acres or 13.7% of all land in Meriden is classified as right-of-ways (ROWs). A majority of the land classified as ROWs in Meriden is a result of

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<sup>1</sup> It is important to note that these percentages were taken from each community's respective Plans of Conservation and Development, and thus were calculated at different points in time. For example, Bristol's percentage is from 1998, Hamden's is from 2002, and Meriden's is from 2007.

Interstate 91, Interstate 691, and Route 15 bisecting the City. The remaining 1,187.9 acres contain the municipal, educational, medical, religious, fraternal, and other non-profit service institutions in the City.

### **Residential**

Historically, Meriden has been a residential community, consisting largely of low density single family residential units. In fact, in 2007 single family residences comprise over 82% of all residential land. The City has been experiencing significant growth in the residential land use category over the last few decades. From 1981 to 2007 residential land use grew by 29.4% from 4,800 acres to 6,212 acres. Based on the 2000 Census indication that the City's population is growing, it is reasonable to expect that this current land use pattern and trend will continue in the City. In addition, it is reasonable to expect that the residential land uses will expand in the coming years in order to accommodate this expected growth. Any expansion of residential uses in Meriden will most likely occur on the remaining vacant and underdeveloped residential land. Therefore, it is helpful for planning purposes to understand how much development can be accommodated on both the City's remaining raw vacant land and underdeveloped land. To accomplish this task, a development potential analysis has been conducted and is described in the following section.

### **III. ANALYSIS OF DEVELOPMENT CAPACITY**

Balancing the demands for new development with the physical constraints of the landscape and existing regulatory controls can prove to be a significant challenge. Once factors such as availability of the necessary public facilities, adequacy of road and utility infrastructure and protection of valuable natural resources are considered, the balance gets even more

complicated. This challenge is compounded by the reality that there is only a finite amount of vacant land available for development. Understanding where the developable land is located within the City and how much development can be accommodated based on existing regulatory controls and physical constraints on the landscape is the first step in establishing a development plan for the future. Once this is accomplished, issues such as infrastructure limitations and natural resource protection can be considered and new growth can be properly planned.

As a component of the Meriden Plan of Conservation and Development, an analysis was conducted assessing the development potential for the City. This analysis reviewed vacant and agricultural land zoned for residential and non-residential uses for its physical capacity to support new or expanded growth. This growth is expressed in terms of potential dwelling units for vacant land areas zoned for residential use and total acreage for land areas zoned for non-residential use. In addition to privately owned vacant land, the City of Meriden has been acquiring blighted properties throughout the City for the purpose of blight removal and creating redevelopment opportunities. The blighted properties available for sale and underdeveloped residential parcels are also included in this analysis. Underdeveloped parcels for this analysis have been defined as residentially zoned parcels that are greater than three times the minimum lot size by zone.

In addition, an estimate of the net additional dwelling units that could be created through redevelopment of currently built parcels in the C-1, C-2, R-3 and R-4 zones is provided.

The development capacity calculated represents a reasonable scenario of growth but not an absolute buildout of every parcel in Meriden to a maximum density.

## Methodology

The process to calculate development potential for vacant land involves three basic steps. First, the total amount of vacant, agricultural, and select municipally owned vacant land is determined by reviewing the previously conducted land use inventory. The parcels that have been identified as vacant or agricultural are illustrated on the map titled *Vacant & Agricultural Land*.

The second step of the development potential process involves calculating the developable area of the vacant land. This is accomplished by removing any areas from the parcel that contain development constraints such as wetlands, floodplains or steep slopes (greater than 20%). These physical attributes are typically considered the more significant physical constraints to new development projects and are illustrated on the map titled *Potential Development Constraints*. For those parcels that are large enough to be subdivided (greater than three times the minimum lot size as defined by zoning), an additional deduction of 20% of the total parcel size was factored in to account for the required internal roadways.

The third and final step in the analysis applies the minimum lot size of the underlying zone to the remaining net developable land. It should be noted that parcels were “built-out” to the maximum allowed density by zone. The City’s zoning districts are illustrated on the map titled *Existing Zoning*. This process yields an approximation of potential residential dwelling units from vacant land.

For currently developed parcels in the C-1, C-2, R-3 and R-4 zones, net dwelling units from private redevelopment is estimated. These zones have a number of parcels currently occupied by single family, duplex and triplex houses. Additional dwelling units are permitted under zoning. Investor owned properties are prevalent in these zones thereby providing the motivation to produce

additional units. One factor militating against the redevelopment in these zones is the small size of the developed lots. The lot sizes range from a mean size of 0.11 acres in the C-1 district to 0.49 acres in the C-2 district. A factor of 25% of the potential lots, randomly selected, was used for the redevelopment scenario.

## Land Analysis

As illustrated in Table 3, 11.9% of the City is classified as Vacant Land. An additional 2.6% is classified as agricultural and as stated earlier is included in the development potential analysis. Visualizing the distribution of these vacant and agricultural parcels (see Vacant and Agricultural Land map) is important in order to gain an understanding of *where* future development on raw vacant land can be

**Table 4**  
**Vacant & Agricultural**  
**Land Analysis by Zone District**

Zone	Acres within Zone District (acres)	Vacant & Agricultural Land (acres)	Percent of Zone Vacant & Agricultural	% of Total Vacant & Agricultural Land
C-1/C-1A	243.5	12.2	5.0%	0.7%
C-2	360.2	80.3	22.3%	4.8%
C-3	571.3	33.9	5.9%	2.0%
C-4	16.5	1.1	6.5%	0.1%
M-1	281.6	38.8	13.8%	2.3%
M-2	247.8	25.8	10.4%	1.5%
M-3	643.8	39.1	6.1%	2.3%
M-4	322.7	71.6	22.2%	4.3%
NCDD	24.9	0.4	1.5%	0.0%
PDD	505.8	43.4	8.6%	2.6%
PEOD	26.0	0.0	0.0%	0.0%
PRD	295.5	8.9	3.0%	0.5%
R-1	5,188.4	374.5	7.2%	22.3%
R-2	863.8	45.4	5.3%	2.7%
R-3	658.1	22.2	3.4%	1.3%
R-4	106.8	6.1	5.7%	0.4%
R-R	3,546.7	615.2	17.3%	36.6%
RDD	289.1	50.1	17.3%	3.0%
S-R	1,167.9	211.9	18.1%	12.6%
<b>Total:</b>	<b>15,360</b>	<b>1,680.8</b>	<b>10.9%</b>	<b>100.0%</b>

accommodated. By combining the zoning boundaries with the vacant and agricultural land through overlays, a detailed



understanding can be gained on *what* type of development can be produced under existing regulations. The map titled *Vacant & Agricultural Land by Zoning District* illustrates the relationship between existing zoning and the remaining vacant and agricultural parcels in the City and their distribution is summarized in Table 4.

### **Residential Development Capacity**

In order to calculate the development capacity of residentially zoned land, each parcel was assessed as to its capacity to accommodate new development based on the presence of development constraints. For the purposes of this analysis, development constraints are defined as wetlands, steep slopes in excess of 20%, water features, and the Federal Emergency Management Agency (FEMA) 100-year floodplain. Areas that contain development constraints were subtracted out from the gross land area, yielding a net developable land area. For those parcels that are large enough to be subdivided (greater than two times the minimum lot size as defined by zoning), an additional deduction of 20% of the total parcel size was factored in to account for the potentially required internal roadways. Finally, the minimum lot size of the underlying zone is applied to the remaining net developable land yielding an approximation of potential residential dwelling units. Vacant parcels with a net buildable area of less than one-half the minimum lot size but have a gross area greater than or equal to the minimum lot size were included for potential dwelling units. The results of this analysis are summarized in Table 5 on the following page.

**Table 5**  
**Residential Development Potential**  
**Under Existing Zoning Regulations**

Zone	Gross Raw Vacant Land (Acres) <sup>(1) (2)</sup>	Gross Under-developed Residential Lots (Acres)	Constrained Land (Acres)	Net Buildable Land (Acres) <sup>(2)</sup>	Dwelling Units From Existing Vacant Building Lots	Dwelling Units From Raw Vacant Land	Dwelling Units Under-developed Lots	Total Potential Dwelling Units
<b>R-R</b>	555.1	517.47	400.8	671.8	76	277	201	<b>554</b>
<b>S-R</b>	187.4	286	154.1	319.3	20	296	319	<b>635</b>
<b>R-1</b>	336.1	901.44	517.6	719.9	243	608	993	<b>1,844</b>
<b>R-2<sup>(3)</sup></b>	33	114.7	62.2	85.5	168	113	335	<b>616</b>
<b>R-3<sup>(4)</sup></b>	17.1	39.9	21.9	35.1	11	192	103	<b>306</b>
In the R-3 zone, 25% of single, two, and three family lots were analyzed for redevelopment potential as multi-family units. Redevelopment of the 306 parcels (57.7 tot. acres/ 39.3 net acres) yielded an estimated <b>144 Net Potential Dwelling Units</b> .								144
<b>R-4</b>	4.6	0	0.8	3.8	0	57	0	<b>57</b>
In the R-4 zone, 25% of single, two, and three family lots were analyzed for redevelopment potential as multi-family units. Redevelopment of the 91 parcels (16.5 tot. acres/ 12.6 net acres) yielded an estimated <b>52 Net Potential Dwelling Units</b> .								52
<b>PDD</b>	43.4	0	29.1	14.3	225	0	0	<b>225</b>
<b>Residential Zone Subtotal:</b>	<b>1,176.7</b>	<b>1,859.5</b>	<b>1,186.5</b>	<b>1,835.4</b>	<b>743.0</b>	<b>1,543.0</b>	<b>1,951.0</b>	<b>4,433</b>
<b>C-1<sup>(5)</sup></b>	24.5	----	15.5	9.1	13	747	----	<b>760</b>
In the C-1 zone, 25% of single, two, and three family lots were analyzed for redevelopment potential as multi-family units. Redevelopment of the 28 parcels (3.2 tot. acres/ 2.2 net acres) yielded an estimated <b>103 Net Potential Dwelling Units</b> .								103
<b>C-2<sup>(5)</sup></b>	84	----	63.5	20.5	9	583	----	<b>592</b>
In the C-2 zone, 25% of single, two, and three family lots in the R-4 zone were analyzed for redevelopment potential as multi-family units. Redevelopment of the 18 parcels (8.9 tot. acres/ 5.8 net acres) yielded an estimated <b>115 Net Potential Dwelling Units</b> .								115
<b>Commercial Zone Subtotal:</b>	<b>108.5</b>		<b>79.0</b>	<b>29.6</b>	<b>22.0</b>	<b>1,330.0</b>		<b>1,570</b>
<b>Grand Total:</b>	<b>1,176.7</b>	<b>1,859.5</b>	<b>1,186.5</b>	<b>1,835.4</b>	<b>765.0</b>	<b>1,543.0</b>	<b>1,951.0</b>	<b>6,003</b>

<sup>(1)</sup> Includes privately owned vacant land, municipally owned vacant land for sale, and agricultural land.

<sup>(2)</sup> Vacant land from existing vacant building lots on the ground not included in this total.

<sup>(3)</sup> Dwelling units based on 48 building lots with 2.5 units per lot.

<sup>(4)</sup> Calculation of dwelling units based on a density of 1 unit/2,500 sqf of lot area.

<sup>(5)</sup> Under-utilized parcels in C-1 (4,000sqf) and C-2 (8,000 sqf) zones are calculated as single family building lots in this analysis.

General Note: Complete residential redevelopment potential is not shown in this table.

## Residential Development Potential

The results of the residential development potential analysis indicate that, based upon existing zoning, approximately 4,433 additional dwelling units potentially could be built within the City's residential zones and an additional 1,570 dwelling units within the commercial zones yielding a total of 6,003 units. This represents an approximate 23.8% increase over the 25,131 existing dwelling units calculated during the 2000 census. Table 6 and the *Potential Dwelling Units by Planning Sector* map illustrates the distribution of the dwelling units calculated in this analysis according to their respective planning sector.

An interesting observation that can be drawn from the Potential Dwelling Units map is that greatest number of potential dwelling units are found in the East Sector. Although the East Sector has the greatest number of units it does not have the greatest density. In fact, at a density of 0.33 units/acre, it has a potential density lower than the City average of .39 units/acre. However, this is not surprising because this sector has the greatest area of all the planning sectors and also contains a large amount of the City's vacant or agricultural land. The Central and North End Sectors have the second and third largest number of potential units at 1,243 and 1,235 and the greatest overall densities 1.30 and 0.63 units/acre. These three sectors can expect the greatest amount of future residential development.

It is important to note that these results come with the caveat that due to the many variables involved in land development, these numbers are speculative as the factors that permit land to be developed may change. One important factor is the possibility of regulatory changes on the development of land. These changes could manifest in zoning changes, which could place fewer or greater restrictions on the buildable area of a parcel. In addition, vacant land can be purchased for open space,

<b>Planning Sector</b>	<b>Total Potential Dwelling Units</b>	<b>Total Area (acres)</b>	<b>Total Potential Dwelling Unit Density (new units/acre)</b>
Central	1,243	955.3	1.30
North End	1,235	1,947.1	0.63
South Central	678	1,795.9	0.38
South	285	812.7	0.35
East	1,325	4,058.1	0.33
West	739	2,987.5	0.25
North East	498	2,804.0	0.18
<b>Total:</b>	<b>6,003</b>	<b>15,361</b>	<b>0.39</b>

which would obviously remove acreage from the developable land inventory. Also market factors could drive land values to increase to a level that would stimulate assembly and redevelopment of developed lots to their maximum dwelling unit yield which would be greater than shown in the tables, particularly for multifamily units. The development potential totals given here are intended to indicate a relative order of magnitude estimate and will likely change over time.

## Non-Residential Development Capacity

When describing non-residential development capacity, the distribution of the remaining vacant land within these zones is an important factor in City-wide planning. In Meriden, it becomes increasingly important due to the limited amount of remaining developable vacant land zoned for non-residential use. Therefore, for purposes of this Plan of Conservation and Development Update, non-residential development capacity is evaluated by the distribution of the remaining vacant parcels zoned for non-residential use. The distribution is illustrated on the map titled *Vacant Land Zoned for Non-Residential Use* and is tabulated in Table 7.

<b>Zone</b>	<b>Gross Raw Vacant Land (Acres)</b>	<b>Constrained Land (Acres)</b>	<b>Net Buildable Land (Acres)</b>	<b>Potential Building Ground Floor Area (SQF)*</b>
C-1	12.2	3.4	8.8	114,998
C-2	80.3	60.2	20.1	262,667
C-3	33.9	15.0	18.9	246,985
C-4	1.1	0.1	1.0	13,068
NCDD	0.4	0.1	0.3	3,920
<b>Commercial Zone Subtotal:</b>	<b>127.9</b>	<b>78.8</b>	<b>49.1</b>	<b>641,639</b>
M-1	38.8	10.4	28.4	247,421
M-2	25.8	10.0	15.8	137,650
M-3	39.1	16.0	23.1	201,247
M-4	71.6	41.2	30.4	264,845
<b>Industrial Zone Subtotal:</b>	<b>175.3</b>	<b>77.6</b>	<b>97.7</b>	<b>851,162</b>
RDD	50.1	12.5	37.6	491,357
PEOD	0.0	0.0	0.0	0
<b>Planned Dev. Districts Subtotal:</b>	<b>50.1</b>	<b>12.5</b>	<b>37.6</b>	<b>491,357</b>
<b>Grand Total:</b>	<b>353.3</b>	<b>168.9</b>	<b>184.4</b>	<b>1,984,158</b>

\* Floor area ratio (FAR) of 0.3 was used for the commercial zones and planned districts while 0.2 was used for the industrial zones.

The City has a limited amount of available land for development in commercial zones (49.1 net acres / est. 641,639 sq. ft. of building space), industrial zones (97.7 net acres / est. 851,162 sq. ft. of building space), and planned development districts (37.6 net acres / est. 491,357 sq. ft. of building space). The majority of this land is in the form of relatively small (1 acre or less) parcels scattered throughout the City with a significant number of them located along the main arterials feeding the City center. The most notable cluster of larger parcels is located along Research Parkway. Due to the limited amount of land, it is clear that reuse, redevelopment, and assembling of properties will play an increasingly critical role in the City's future development. Studies have shown that the life cycle of commercial buildings continues to shrink with 25 to 40 years of use as the current range. As buildings become obsolete they will be adapted to new uses or replaced by contemporary structures. The locational attributes of easy access and infrastructure remain important to the continued viability of the non-residential zones throughout Meriden. The remaining vacant land in these zones will play a role in

reshaping parcels to accommodate expansions of existing business or the creation of new development sites. It is in the City's best interest to remain flexible in its regulations so that the ever changing building forms required by business can be accommodated while respecting traditional neighborhood values.

## **Population and Housing Unit Density**

Based upon the 2005 estimated population for the City of Meriden from the U.S. Census Bureau and Meriden's land area of 24 square miles, the City has a population density of 2,517 persons per square mile. While this figure is substantially higher than the State of Connecticut's population density of 722.5 persons per square mile, it is very similar to the population density of Bristol (2,315.2), East Hartford (2,731.8) and Manchester (2,035.6), three communities with similar population levels and development patterns as Meriden. However, Meriden is far less dense than Connecticut's larger cities such as Bridgeport, New Haven and Hartford, which have population densities ranging from roughly 6,600 to 8,700 persons per square mile. Thus, for a community of approximately 60,000 people, Meriden is not overly dense from a population standpoint.

In terms of housing unit density, Meriden's estimated 2005 housing unit total of 25,131 units results in an overall housing density of 1.64 housing units per acre. Once again, this density is in line with the densities of Bristol (1.58), East Hartford (1.85) and Manchester (1.43). Similar to the population density figures, Meriden's housing density is far below that of Bridgeport, New Haven and Hartford, which range from 4.36 to 5.31 units per acre. Thus, residential development density in Meriden appears to be quite standard for a city of its size and composition.

Density figures for the communities surrounding Meriden and other reference communities are included at the end of this memorandum as Appendix A.

To assess the impact of the build-out estimate, the estimated addition of 6,003 housing units are added to the current housing unit count of 25,131 units resulting in 31,134 units. This increases the housing unit density to 2.03 units per acre. Applying the current household size of 2.4 persons per unit to the 31,134 units yields a City population of 74,721 and a population density of 3,113 persons per square mile.

#### **IV. CONCLUSIONS**

- The major land use category in Meriden is residential with 40.4% of the land committed to this use. Single family housing comprises 82% of the residential acreage.
- The combined area currently in use for commercial and industrial purposes is 9.9% of the City's acreage. This percentage is less than would be expected given Meriden's size and maturity. A 12% to 15% use factor is more typical for cities Meriden's age and size. Currently, 19.7% of the land area in Meriden is zoned for commercial and industrial purposes with some additional potential in the mixed use PDD zone.
- Commercial land is clustered along major transportation corridors, creating the perception that Meriden is much more commercially and industrially developed than in fact it is.
- Much of Meriden's vacant land is located in low-density residential zones.
- The lack of a sizeable inventory of raw vacant land in commercial and industrial zones indicates that much of Meriden's future development activity will be a combination of infill development, redevelopment and revitalization projects.
- Under existing zoning there exists the potential for 6,003 new dwelling units to be built in the City.
- The greatest amount of potential residential growth will occur in the East, Central, and North End Planning Sectors.
- A total of 184.4 net buildable acres of non-residential land remains under existing zoning throughout the City. Slightly under 2 million square feet of commercial or industrial space could be built on this acreage.
- In terms of population and housing unit density, Meriden is very similar to other Connecticut communities of roughly the same size, and given its number of residents is not overly dense.

# APPENDIX A