

Chambersburg Borough Comprehensive Plan



Appendix 2: Build-Out Analysis Report *Draft*

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Chambersburg Borough Franklin County, PA



Comprehensive Plan Appendix 2: Build-Out Analysis Report

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BUILD-OUT ANALYSIS

The purpose of a build-out analysis is to show a locality what land is available for development/redevelopment, how much development/redevelopment can occur and at what densities, and what consequences may result when complete build-out of available land occurs according to current zoning regulations or modified zoning regulations. A build-out analysis is a tool used to depict possible future conditions under a probable or worse case scenario, preferred scenario and/or alternative scenarios. A build-out analysis can also help to quantify the costs of growth.

The build-out analysis for Chambersburg Borough has been developed for the purpose of using the results with comprehensive planning. The results of this analysis can be used to identify possible changes with respect to land use policy and regulation. This analysis is not designed to depict ideal or preferred conditions. Instead, the analysis provides an assessment of how development may occur under a maximum build-out of the Borough some time within the planning horizon (*some time within the next 20 years*). The analysis considers a **probable future build-out** under current zoning and an **alternate future build-out** considering redevelopment opportunities.

ANALYZING LAND CAPACITY AND DEMAND

This report analyzes land capacity and demand using a variety of methods. Those methods include a build-out analysis, housing capacity analysis and fiscal impact assessment. The build-out analysis depicts a **probable future scenario** under current zoning regulations for existing development and lands available for development. This analysis is augmented with analysis of an additional scenario referred to as the **alternate future scenario** based upon input from the Planning & Zoning Commission, Borough staff and the community coupled with planning analysis. The housing capacity analysis projects possible additional housing units based upon lands available for development. And, the fiscal impact assessment evaluates the results of the build-out analysis considering projection of residential and non-residential land uses to determine potential tax revenues generated under the probable future scenario. This analysis supports the development of a future land use plan for the comprehensive plan.

EXPLANATION OF BUILD-OUT METHODOLOGY

Build-out analysis is a lot-by-lot or area-by-area analysis to estimate the total number of existing and developable units (housing units and square footage of non-residential space), based on current zoning and other applicable land use regulations for a particular study area. The analysis can be conducted for various development scenarios (either under current zoning or modified zoning) for purposes of land use analysis, economic analysis and impact assessment. This type of analysis provides the basis for discussion and consensus building around a preferred future plan for a particular region, community, or site.

The following explains the build-out analysis methodology used to generate population, housing, commercial and industrial land use projections for Chambersburg Borough. The scenario analysis identifies potential future land use, population, housing units and square footage of non-residential space projected for the study area. Scenario analysis and results are further discussed to support identification of a draft future land use plan for Chambersburg Borough.

A **probable build-out scenario** was used to portray the probable future under current zoning and to determine future development potential. An **alternate build-out scenario** was used to portray a possible alternative for future build-out with modified zoning. This scenario, alternate build-out, includes the results of the probable build-out scenario augmented to include opportunities for redevelopment. The build-out analysis is based on existing data, existing conditions, and basic assumptions. The following provides a general description of these variables.

Within the development scenario there are two possible land types available for development including vacant undeveloped land and opportunity sites for possible redevelopment / revitalization. Vacant or undeveloped land includes land that is currently unimproved or is vacant. Redevelopment / revitalization areas or opportunity sites includes land which has been developed but may be considered as under utilized. Opportunity sites targeted for possible redevelopment / revitalization were identified through discussions and activities with the Planning & Zoning Commission and community input. The development standards and densities used in this analysis were derived from Chambersburg Borough's Zoning Ordinance. The following describes the various data, information and assumptions utilized in the analysis.

EXPLANATION OF MAP, DATA AND INFORMATION SOURCES

This section provides details about the map coverages, data and information utilized for build-out analysis.

Base Layers

Base layers include data needed to establish current conditions. The base layers are used to determine developable lands, or lands that are likely to be developed in the future. Base layer sources include Pennsylvania Department of Transportation, Pennsylvania Spatial Data Access Center, Franklin County Tax Assessment Office, Chambersburg Borough, and field observation. Map 1: Existing Land Use, from the Existing Conditions Report (October 2007) illustrates current land uses and illustrates the basis upon which build-out scenarios were developed.

- **Areas Available for Development**

Since spatially referenced digital tax parcel boundaries are not available for Chambersburg Borough, tax parcel boundaries were derived from scanned tax plats and applied where appropriate to estimate parcel boundaries. Otherwise, parcel boundaries and areas available for development were delineated based on field observation and orthophotography to determine approximate boundaries.

- **Orthophotography**

Digital Ortho-photography was provided by the Pennsylvania Spatial Data Access Center (PASDA) through the PAMAP program as sponsored by the Department of Conservation and Natural Resources (DCNR). The images were captured in April of 2003. Chambersburg Borough GIS Department also furnished digital orthophotography captured circa 2000.

- **Zoning Districts**

Current Zoning Districts from Chambersburg Borough were used to determine types of permitted development. Each area available for development was assigned an appropriate Zoning District. Specific Zoning information pertaining to each Zoning District is provided by Chambersburg Borough. The descriptions were derived from the Official Zoning Ordinances. Map 2: Zoning Districts illustrates current Zoning Districts.

Chambersburg Borough Zoning Districts

Table 1: Chambersburg Zoning Districts 2005 Acreages provides an indication of the current acreages of land by Zoning Districts. As Table 1, indicates the predominant Zoning District in the Borough (using acreages) includes low and moderate density residential which comprise over half (59%) of the Borough's land. Commercial districts including Central Core, Professional Office, Distributive Commercial Highway, and Distributive Commercial Neighborhood comprise approximately 18% (18.1%) of the Borough's land. Industrial districts including Heavy Manufacturing and Medium Manufacturing comprise approximately one-fifth (21.5%) of the Borough's land.

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Table 1: Chambersburg Zoning Districts 2005 Acreages

Zoning District	Acres	Percent of Total Acres
Central Core (CC)	87	2%
Professional Office (PO)	56	1%
Distributive Commercial Highway (DCH)	561	13%
Distributive Commercial Neighborhood (DCN)	99	2%
Health Institutional (HI)	9	0%
Health Care Service (HC)	36	1%
Heavy Manufacturing (HM)	620	14%
Medium Manufacturing (MM)	335	8%
Moderate Density Residential (MDR)	1,246	28%
Low Density Residential (LDR)	1,386	31%
Total	4,435	100.0%

Source: Chambersburg Borough based on 2005 Zoning Districts.

Chambersburg Borough Zoning District Descriptions

The following Zoning District descriptions are only for those districts with land available for development or redevelopment which impact build-out scenarios; the descriptions were derived from Chambersburg Borough's Codified Ordinance Chapter 300: Zoning as adopted in 1982 and amended.

Central Core District (CC)

The district represents the downtown area of Chambersburg and includes mixed uses as permitted in Distributive Commercial Districts as well as uses permitted in Low Density Residential and Moderate Density Residential districts including amusement enterprises (theaters, dance halls, studios, bowling alleys, billiard and pool establishments, skating rinks, golf courses, miniature golf, tennis facilities (courts), health clubs, and commercial swimming pools), hotels or motels, clubs and lodges, any retail, wholesale, service, repair or storage activity, car washes, florists and nurseries, and railway or bus passenger stations and express offices, as well as single family detached and single family attached dwellings such as row homes or townhouses, garden apartments, and other residential units with a minimum floor space of 625 square feet per dwelling unit.

Professional Office District (PO)

Professional Office (PO) District includes establishments engaged in furnishing professional, personal services, medical, surgical or other services to individuals, including offices of physicians, dentists and other health practitioners, medical and dental clinics and professional offices of persons engaged in such activities as accounting, engineering, consulting, computer programming, real estate, insurance, banking, travel agency, financial planning or other similar uses.

Distributive Commercial Highway (DCH)

The DCH district permits uses such as amusement enterprises, (theaters, dance halls, studios, bowling alleys, billiard and pool establishments, skating rinks, golf courses, miniature golf, tennis facilities (courts), health clubs, and commercial swimming pools), hotels or motels, clubs and lodges, any retail, wholesale, service, repair or storage activity, car washes, florists and nurseries, railway or bus passenger stations and express offices, and mobile home parks.

Heavy Manufacturing District (HM)

Uses permitted in the Distributed Commercial Highway (DCH) District include food and kindred products (except slaughterhouses and livestock auctions), tobacco manufacturing, lumber and wood products, furniture and fixtures, paper and allied products, gas company, distribution and storage, ice manufacture and cold storage, power generating plants, trucking terminals, and any other use similar in character to any use listed above.

Medium Manufacturing District (MM)

Uses permitted in the Medium Manufacturing (MM) District include food and kindred products (except slaughterhouses and livestock auctions), tobacco manufacturing, lumber and wood products, furniture and fixtures, paper and allied products, gas company, distribution and storage, ice manufacture and cold storage, power generating plants, trucking terminals, and any other use similar in character to any use listed above.

Moderate Density Residential (MDR)

Uses permitted in the Moderate Density Residential (MDR) District include single family detached and single family attached dwellings such as row homes or townhouses, and garden apartments with a maximum unit density of 12 units per acre with no more than eight units per series of units.

- **Environmentally Sensitive Areas**

Environmentally Sensitive Areas include the environmentally sensitive areas as mapped and presented in Map 3: Floodways and Wetlands of the Existing Conditions Report. These areas include Federal Emergency Management Agency (FEMA) flood plains (100 year flood plains) and National Wetlands Inventory wetlands (NWI).

BUILD-OUT ANALYSIS PROCESS

The build-out analysis process describes how land available for development is identified and explains basic assumptions that are applied.

Build-Out Analysis Process

Step 1. Adjust Year 2000 Data to Match Existing Conditions

Adjust population and housing unit counts based on building permit activity.

Step 2. Apply Residential Development Projections

Chambersburg Borough has projected residential development based on “draft” subdivision land development plans and land currently in residentially zoned Zoning Districts which are most likely to be developed within the next five years. The results of the projections are applied to build-out scenarios.

Step 3. Areas Available for Development

These are the areas available for development, other than those used for residential development (Step 2), as based on field observation, orthophotography and Planning & Zoning Commission input. These areas are illustrated in Map 4: Opportunity Sites.

Step 4. Reductions for Environmentally Sensitive Areas

For build-out scenarios: remove from areas available for development any portions of areas available for development that are in Environmentally Sensitive Areas including, flood plains and wetlands.

Step 5. Lands Available for Development (LAD) Land Use Assignment

For build-out scenarios: Lands Available for Development were assigned land uses based upon current zoning regulations as presented in Table 2: Zoning Regulations and Build-Out Assumptions. Map 5: Development / Redevelopment Opportunities illustrate lands available for development as well as recent developments and pending developments.

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Build-Out Basic Assumptions

The following assumptions were made concerning areas available for development and concerning the type of development that may occur.

1. Since various development types are permitted in each Zoning District, there is a myriad of possibilities for the type of development that will or can occur; therefore, the type of development that may occur was assumed. Table 2: Zoning Regulations and Build-Out Assumptions, provides the assumptions that were used in the build-out scenario.

Table 2: Zoning Regulations and Build-Out Assumptions

Zoning District	Zone Name	Percentage Reduction in Acreage for Infrastructure Development	Area Regulations (Maximum Lot Coverage / Building Size)	Height Regulations / Maximum Units Per Acre	Build-Out Comments
Parcels Zoned CC	Central Core	0%	None	Up to 6 floors permitted - Applying 3 Floors	Assumes first floor commercial and two floors of residential with 625 square feet per unit for residential development.
Parcels Zoned PO	Professional Office	5%	Not more than 65% of Total Lot Area	Up to 4 floors (50 feet) permitted – Using 2 floors for Build-out	Assuming more modern style professional office buildings with higher ceilings
Parcels Zoned DCH	Distributive Commercial Highway	5%	Not more than 65% of Total Lot Area	6 floors (72 feet)*	Build-out at 100% Commercial
Parcels Zoned HM	Heavy Manufacturing District	5%	None	6 floors (72 feet)*	Build-out at 100% Industrial (Large scale warehousing)
Parcels Zoned MM	Medium Manufacturing	5%	None	6 floors (72 feet)*	Build-out at 100% Commercial
Parcels Zoned MDR	Moderate Density Residential	5%	Not more than 35% of Total Lot Area	3,600 square feet per dwelling unit	12 Units Per Acre with no more than 8 units per series

*** Although these Zones permit up to 6 floors or 72 feet), modern style non-residential development is typically one floor (with 25-30 feet floors), therefore a value of 1.5 floors will be applied.*

2. Properties identified as lands available for development, for build-out scenario purposes, are desired to develop. In some instances, property owners may have no intention of developing their properties, but for purposes of conducting build-out analysis they are considered to develop. **Map 6: Probable Build-Out Opportunity Sites and Map 7: Alternate Build-Out Opportunity Sites illustrates properties used for respective build-outs.**
3. Properties identified as lands available for development are able to meet the minimum lot size, minimum setbacks, access, and impervious surface requirements, among others, as prescribed in the Zoning Ordinances. Lots not meeting these requirements will remain vacant.

4. Land that has already been developed (lands not identified as areas available for development), will remain developed as such and will not be further subdivided or developed.
5. Fiscal Impacts estimates assume 2007 dollars, and complete actualization of the Build-Out Scenario.
6. Specific assumptions are further defined in the Notes column of individual build-out results.

Build-Out Scenario Assumptions

Once the Build-Out Basic Assumptions are applied to areas available for development by zoning district, land is “built-out” using scenario assumptions. The following describe the specific assumptions for each build-out scenario.

- **Scenario: Probable Future - Build-Out under Current Zoning**

Probable Future scenario assumptions include a build-out of lands available for development (Map 6) using data as presented in Table 2: Zoning Regulations and Build-Out Assumptions. Result tables for this scenario are cumulative, meaning that build-out results are added to current conditions.

- **Scenario: Alternate Future - Build-Out under Current Zoning & Redevelopment**

Alternate Future scenario assumptions include a complete build-out of lands available for development (Map 7) using data as presented in Table 2: Zoning Regulations and Build-Out Assumptions *plus* inclusion of lands identified for redevelopment. The majority of the build-out is under current zoning regulations while those sites of a non-residential nature (Opportunity Sites number 201 through 268 on Map 7) were targeted for residential redevelopment. These sites may require rezoning to fulfill the build-out option. However, density requirements used for the build-out are consistent with requirements of the Moderate Density Residential (MDR) Zoning District. Result tables for this scenario are cumulative, meaning that build-out results are added to current conditions as developed during the Build-Out Analysis Process.

BUILD-OUT PROCESS STEP RESULTS

The following include the results of each step as outlined in the Build-Out Process.

STEP 1: RESULTS - HOUSING UNIT & POPULATION ADJUSTMENTS

Since the completion of the 2000 Census, there has been residential development in Chambersburg Borough and therefore a change in total number of housing units and population. To account for the change in housing units and population, residential building permits and population per household data have been used to adjust the 2000 Census figures. Also, there are additional or proposed dwelling units, or pending developments which must be accounted that impact the total number of dwelling units, population, and school aged children.

Throughout the build-out scenarios, two “*constant variables*” were applied including average household size and school aged children as a percent of total population. The variable average household size of 2.31 persons per household was applied to new units, which is based on 2000 Census data and is also used in the Chambersburg Borough Act 537 Plan (Wastewater Treatment Plan). The school aged population as a percent of total population variable which is equivalent to 17.3% of the total population is also based on 2000 Census data. Note that vacancy rates have been carried though the adjustment process with the assumption that people’s current occupancy behaviors will not be altered.

Three tables were used to develop population and housing adjustments and are referred to as Table A, Table B, and Table C. These tables are referred to throughout the document and are instrumental in establishing an accurate portrayal of existing population and housing estimates; upon which the build-out scenario results are added.

Table A: Residential Building Permits Since 2000 Census, illustrates that 567 new residential units have been constructed since the 2000 Census. Therefore, the additional units were added to Year 2000 Total Units and used to generate the Year 2007 Adjustment column in Table 3; population was adjusted by applying 2.31 persons per unit, and school aged population was adjusted by applying 17.3% of the total population.

Table A: Residential Building Permits since 2000 Census

Year	2000	2001	2002	2003	2004	2005	2006	2007	TOTAL
Number of Units	49	34	39	35	30	114	175	91	567

Source: Chambersburg Borough Building & Codes Department as of June 2007.

Table B: Additional Approved and Proposed Dwelling Units, illustrates current approved and proposed developments within Chambersburg Borough. These units impact housing unit, population, and school aged children. The impacts of these additional units are illustrated in Table 1: Population / Housing Adjustment, Pending Development Based on Proposed Units Table B column. Table B illustrates that as of September 2007, there are 379 acres of land which are approved or proposed for development, which may add an additional 826 dwelling units to the total dwelling units within Chambersburg Borough. Note that several of the approved or proposed development have existing units.

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Table B: Additional Approved and Proposed Dwelling Units

Approved or Proposed Development Name	Zoning	Acres Available	Current Dwelling Units	Proposed Dwelling Units	Total Dwelling Units
Chambersburg Family Townhomes	MDR	5	0	40	40
The Enclave	MDR	34	101	50	151
Grandview Crossing	LDR	5	2	18	20
Laurich Meadows	MDR	94	244	6	250
Maple Run	LDR/MDR	108	308	17	325
Millcreek Acres West	MDR	23	105	95	200
Nicholson Square	LDR/MDR	74	379	79	458
Progress Square	MDR	2	0	30	30
Progress Village	MDR	28	16	451	467
Total		373	1,155	786	1,941

Source: Chambersburg Borough, September 2007.

According to Chambersburg Borough, of the 786 proposed dwelling units (Table B), 567 dwelling units are accounted for in Table A: Residential Building Permits since 2000 Census, yielding a net proposed 219 dwelling units (786 proposed dwelling units minus 567 residential building permits yields 219 dwelling units). The net proposed 219 dwelling units were used to generate the data in the Pending Development column of Table 1; population was adjusted by applying 2.31 persons per unit, and school aged population was adjusted by applying 17.3% of the total population. Data from Table A and Table B were used to create Table 3: Population / Housing Adjustment.

Table 3: Population / Housing Adjustment

Variables	Year 2000 Total	Year 2007 Adjustment Based on Table A	Pending Development Based on Proposed Units Table B
Population	17,862	20,494	21,000
Housing Units	8,305	8,872	9,091
Occupied	7,722	8,249	8,453
Vacant	583	623	638
Constant Variable: Average household size (Total Population divided by Occupied Housing Units)	2.31	2.31	2.31
School Aged Population (17.3% of Total Population)	3,090	3,546	3,633

Source: 2000 US Census Data, and Chambersburg Borough Building & Codes Department.

Note: Highlighted cell represents a constant variable carried through build-out scenarios.

Table 3: Population / Housing Adjustment, illustrates figures for population, housing units, occupancy status, average household size, and school aged population (ages 5-19 years) for Year 2000, Year 2007 Adjustments, and Pending Developments. Table 3 indicates that in 2007, there were 20,494 people residing in 8,249 housing units and that 3,546 people were of school age (5-19 years old).

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STEP 2: RESULTS – APPLICATION OF RESIDENTIAL PROJECTIONS

Step 2 builds upon the results of Step 1. Chambersburg Borough Office of Zoning developed projections for residential development based on “draft” subdivision / land development plans and areas where land was most likely to be developed in the next five years. The projections were based on allowable units using current zoning, and are presented in Table C: Allowable Units Using Current Zoning & Land Available for Residential Development & Land Available for Residential Development. Table 4: Population / Housing Projections, are the results of applying data from Table C: Allowable Units Using Current Zoning & Land Available for Residential Development, to Table 3: Population / Housing Adjustment.

Table C. Allowable Units Using Current Zoning & Land Available for Residential Development

Name / Location	Zoning	Acres Available for Development *	Total Single Family Units	Total Duplex Units	Total Town House Units	Total Apartments
Nelson Rotz Property - Mill Road	MDR	60	392	545	817	1,089
Sunnyhill Development - Hollywell Ave / South of Paper Mill Road	MDR	15	98	136	204	272
Nelson Rotz Property - Hollywell Ave / North of Paper Mill Road	MDR	93	608	844	1,266	1,688
Total		168	1,098	1,525	2,287	3,049

**Estimate acres based on plan and lot size with a reduction made for infrastructure, roadways, and right of ways.*

Source: Chambersburg Borough, June 2007.

As Table C illustrates, projections for four types of residential development were generated ranging from single-family units to apartments. According to projections, it is anticipated that 1,098 to 3,049 dwelling units may be added to the existing dwelling units of Chambersburg Borough.

Since current (2006-2007) trends in residential development have been predominantly town homes (refer to section Residential Real Estate Trends 2006 below), the total town house units were applied to population and housing adjustments made in Step 1. The results of the application of data are illustrated in Table 4: Population / Housing Projections, column “Probable Build-Out Based on Allowable Units Table C (Town House Scenario)”.

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Table 4: Population / Housing Projections

Variables	Year 2000 Total	Year 2007 Adjustment Based on Table A	Pending Development Based on Proposed Units Table B	Probable Build-Out Based on Allowable Units Table C (Town House Scenario)	Difference Between Year 2007 and Probable Build-Out
Population	17,862	20,494	21,000	26,473	5,978
Housing Units	8,305	8,872	9,091	11,460	2,588
Occupied	7,722	8,249	8,453	10,656	2,406
Vacant	583	623	638	804	182
Constant Variable: Average household size (Total Population divided by Occupied Housing Units)	2.31	2.31	2.31	2.31	-
School Aged Population (17.3% of Total Population)	3,090	3,546	3,633	4,580	1,034

Source: 2000 US Census Data, Chambersburg Borough Building & Codes Department, and application of Step 1.

Note: Highlighted cell represents a constant variable carried through build-out scenarios.

Table 4: Population / Housing Projections, illustrates that if all the areas identified for residential development were to be developed using town house style housing units the total population of Chambersburg Borough would be approximately 26,500 people, residing in approximately 11,500 housing units, with approximately 4,600 school aged children. The Table also provides increase for each of the variables including an increase in population of approximately 6,000 people, an increase of approximately 2,600 housing units, and an increase of 1,034 school aged children. Data from Table 4: Population / Housing Projections are used to project fiscal and service impacts.

Residential Real Estate Trends 2006

The following data regarding real estates trends from the Existing Conditions report. Home sale price data for Chambersburg Borough (Zip Code Area 17201) were provided by the Pen-Mar Regional Association of Realtors. Table 5: 2006 Home Sales Price Data are for Chambersburg Borough sales only. Data from the following table are used to project fiscal impacts.

Table 5: 2006 Home Sale Price Chambersburg Borough (ZIP Code 17201)

Month	# Sold 2006	Average Sold Price 2006
January	41	\$195,533
February	37	\$205,453
March	67	\$204,251
April	70	\$192,999
May	59	\$174,863
June	69	\$213,583
July	51	\$211,459
August	77	\$192,799
September	48	\$198,484
October	75	\$202,444
November	37	\$200,298
December	41	\$206,838
Average	56	\$199,917
TOTAL	672	\$2,399,004

Source: Pen-Mar Realtors www.chambersburgpahomes.com

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Table 5 indicates that the average monthly number of homes sold in Chambersburg Borough was 56 in 2006, and the homes sold for an approximate average \$200,000. In 2006, the total sales volume in home sales data was approximately \$2.4 million. According to plans submitted to Chambersburg Borough, recent trends in housing for the Borough include townhouse style developments.

STEPS 3- 5: RESULTS – LAND AVAILABLE FOR DEVELOPMENT

Since lands available for development or includes vacant and unimproved lands and developed lands that may be considered for redevelopment/rehabilitation, there are two types of development or redevelopment/rehabilitation options that that may occur; either residential or nonresidential development. In some instances a property may include a mixed development scenario (part residential part non-residential), these instances will be managed on a case by case basis. Map 6: Probable Build-Out Opportunity Sites, and Map 7: Alternate Build-Out Opportunity Sites illustrate the lands available for development / redevelopment used in the Build-Out Scenarios.

- **Residential Development**

Residential analysis evaluates total lands available for residential development and the potential number of additional dwelling units permitted to develop on lands available for development using current zoning and development regulations. The analysis can be used as a measure of the current regulation's ability to provide for additional residential uses. The results of the residential capacity analysis provide valuable information to support land use policy decisions. The following tables illustrate land available for residential development as well as lands considered for redevelopment.

Table 6: Residential Land Available for Development

Zoning District	Total Acres Available	Total Acres Available Less 5 Percent - Assumed for Infrastructure Development	Zone	Area Regulations (maximum building coverage)	Maximum Units Per Acre	Acres Available to Develop - "Building Area"	Potential Units
Parcels Zoned MDR	47.5	45.1	MDR	Moderate Density Residential	Not more than 35% of Total Lot Area	12 Units Per Acre	15.8
Total	47.5	45.1					15.8

Note: These lands and units are in addition to those units as provided in Table C.

Table 6: Residential Land Available for Development illustrates that there is an additional 47.5 acres of land available for residential development which may yield 191 dwelling units (using MDR Zoning District criteria) in addition to the anticipated dwelling units as illustrated in Step 2: Application of Residential Projections.

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Table 7: Residential Land Available for Redevelopment

Zoning District	Total Acres Available	Total Acres Available Less 5 Percent - Assumed for Infrastructure Development	Zone	Area Regulations (maximum building size)	Maximum Units Per Acre	Acres Available to Develop - "Building Area"	Potential Units
Re-development Parcels: Zoned CC	5.4	NA	Central Core	None	Up to 6 Floors permitted - Applying 3 Floors for Build-out (1st floor Commercial plus 2 floors Residential)	5.4	747
Re-development Parcels: Built As Residential Using Zone MDR	49.0	NA	Moderate Density Residential	Not more than 35% of Total Lot Area	12 Units Per Acre	17.2	208
Total	54.4	-				22.5	955

Table 7: Residential Land Available for Redevelopment illustrates that redevelopment of Opportunity Sites as illustrated in Map 6: Build-Out Opportunity Sites, for residential uses may yield an additional 955 dwelling units. Note that for the Central Core properties two floors of residential development were considered at 625 square feet per dwelling unit which account for the bulk (78%) of the additional redeveloped dwelling units.

Table 8: Residential Totals Based on Land Available for Development & Redevelopment

	Total Acres Available for Residential Development and Redevelopment	Acres Available to Develop - "Building Area"	Total Potential Units
Total	101.9	38.3	1,146

Table 8: Residential Totals Based on Land Available for Development & Redevelopment illustrates that development of land available for residential development plus lands identified for residential redevelopment may yield 1,146 additional dwelling units. The potential increase represents a thirteen percent (12.9%) increase in total dwelling units from 2007 estimated dwelling units.

- **Non-residential Development**

Non-residential analysis evaluates total lands available for non-residential development and the total acreage and square footage of non-residential space permitted to develop on lands available for development using current zoning and development regulations. The analysis can be used as a measure of the current regulation's ability to provide for various types of land use. The results of the non-residential capacity analysis provide valuable information to support land use policy decisions and can also be used to assess fiscal impacts of non-residential development.

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Table 9: Non-Residential Land Available for Development

Zoning District	Total Acres Available	Total Acres Available Less 5 Percent - Assumed for Infrastructure Development	Zone	Area Regulations (maximum building size)	Height Regulations / Maximum Units Per Acre	Acres Available to Develop - "Building Area"	Potential Square Footage (Building Area * Number of Floors)
Parcels Zoned PO	19.8	18.8	Professional Office	Not more than 65% of Total Lot Area	4 floors (50 feet) Permitted – Using 2 Floors for Build-out*	12.2	1,064,237
Parcels Zoned DCH	142.9	135.8	Distributive Commercial Highway	Not more than 65% of Total Lot Area	6 floors (72 feet)**	88.3	5,767,382
Parcels Zoned HM	56.8	54.0	Heavy Manufacturing District	None	6 floors (72 feet)**	54.0	3,527,429
Parcels Zoned MM	15.3	14.5	Medium Manufacturing	None	6 floors (72 feet)**	14.5	948,513
Total	234.8	223.1				169.0	11,307,559

* Although this district permits up to 4 floors modern day office construction is usually 2 floors

** Although these Zones permit up to 6 floors or 72 feet), modern style non-residential development of this type is typically one floor (with 25-30 feet floors), therefore a value of 1.5 floors was applied.

Within Chambersburg Borough there are 223.1 acres of land available for non-residential development with a five percent reduction assumed for infrastructure development, refer to Table 9: Non-Residential Land Available for Development. The acreage available for non-residential development may yield approximately 11.3 million square feet of commercial, office, and industrial space.

Table 10: Non-Residential Land Available for Redevelopment / Rehabilitation

Zoning District	Total Acres Available	Total Acres Available Less 5 Percent - Assumed for Infrastructure Development	Zone	Area Regulations (maximum building size)	Height Regulations / Maximum Units Per Acre	Acres Available to Develop - "Building Area"	Potential Square Footage (Building Area * Number of Floors)
Redevelopment Parcels Zoned CC	5.4	NA	Central Core	None	Up to 6 Floors permitted - Applying 3 Floors for Build-out (1st floor Commercial plus 2 floors Residential)	5.4	233,547
Redevelopment Parcels Zoned HM	11.8	NA	Heavy Manufacturing District	None	6 floors (72 feet)*	11.8	772,796
Redevelopment Parcels: Built As Commercial Using Zone DCH	53.0	NA	Distributive Commercial Highway	Not more than 65% of Total Lot Area	6 floors (72 feet)*	34.5	2,252,331
Sub-Total	70.2	-				51.7	3,258,673

** Although this Zone permit up to 6 floors or 72 feet), modern style non-residential development of this type is typically one floor (with 25-30 feet floors), therefore a value of 1.5 floors was applied.

Within Chambersburg Borough there were 70.2 acres of land identified for non-residential redevelopment with no reduction assumed for infrastructure development (infrastructure was assumed to be adequate for redevelopment), refer to Table 10: Non-Residential Land Available for Redevelopment. The acreage available for non-residential redevelopment may yield an additional approximate 3.2 million square feet of commercial, office, and industrial space.

**Table 11: Non-Residential Totals Based on Land Available
For Development & Redevelopment**

Zoning District	Total Acres Available	Acres Available to Develop - "Building Area"	Potential Square Footage (Building Area * Number of Floors)
TOTAL	305.1	220.6	14,566,233

Table 11: Non-Residential Totals Based on Land Available for Development & Redevelopment illustrates that development of land available for non-residential development plus lands identified for non-residential redevelopment may yield approximately 14.6 million square feet of commercial, office, and industrial space.

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BUILD-OUT SCENARIO RESULTS

The following section summarizes the results of Build-Out Scenarios after the basic assumptions have been applied and describes the cumulative impact on existing conditions as developed through the Build-Out Analysis Process Steps.

Table 12: Residential Build-Out Results

Variables	Year 2000 Total	Year 2007 Adjustment Based on Table A	Pending Development Based on Proposed Units Table B	Probable Build-Out Based on Allowable Units Table C (Town House Scenario)	Difference Between Year 2007 and Probable Build-Out	Alternate Build-Out (Probable Build-Out Plus Additional Units)	Difference Between Year 2007 and Alternate Build-Out
Population	17,862	20,494	21,000	26,473	5,978	29,120	8,626
Housing Units	8,305	8,872	9,091	11,460	2,588	12,606	3,734
Occupied	7,722	8,249	8,453	10,656	2,406	11,721	3,472
Vacant	583	623	638	804	182	885	262
Constant Variable: Average household size (Total Population divided by Occupied Housing Units)	2.31	2.31	2.31	2.31	-	2.31	-
School Aged Population (17.3% of Total Population)	3,090	3,546	3,633	4,580	1,034	5,038	1,492

Source: 2000 US Census Data, Chambersburg Borough Building & Codes Department, and application of Step 1.

Note: Highlighted cell represents a constant variable carried through build-out scenarios.

Table 13: Non-Residential Build-Out Results

Development – Redevelopment Areas	Total Acres Available	Acres Available to Develop - "Building Area"	Potential Square Footage (Building Area * Number of Floors) or Units
New Development (Probable Future only)	234.8	169.0	11,307,559.4
Redevelopment (Alternate Future only)	70.2	51.7	3,258,673.3
TOTAL (Alternate Future)	305.1	220.6	14,566,232.7

Under the ***Probable Future Build-Out Under Current Zoning Scenario***, based on Tables 12: Residential Build-Out Results, and Table 13: Non-Residential Build-Out Results, Chambersburg Borough would include approximately 26,500 people, residing in approximately 10,700 housing units, with approximately 4,600 school aged children, and be supported by an additional approximate 235 acres of new non-residential land and yield approximately 11.3 million square feet on non-residential space.

Under the ***Alternate Future Build-Out Under Current Zoning with Redevelopment Scenario***, based on Tables 12: Residential Build-Out Results, and Table 13: Non-Residential Build-Out Results, Chambersburg Borough would include approximately 29,000 people, residing in approximately 11,800 housing units, with approximately 5,000 school aged children, and be supported by an additional approximate 235 acres of new non-residential land and approximately 70 acres of redeveloped non-residential land which may yield approximately 14.6 million square feet on non-residential space.

Map 8: Future Land Use, illustrates the Alternate Future Land uses of Chambersburg Borough under current Zoning using the opportunity sites identified in Map 7: Alternate Build-Out Opportunity Sites as overlaid on Map 1: Existing Land Use. Data from scenarios are used to assess fiscal, service, and school district impacts.

FISCAL IMPACT ASSESSMENT

Estimate fiscal impacts were developed for the build-out scenario. The impacts are based on several variables which reflect current conditions. The variables include current tax rates, a calculated square footage for each use, current average sale price of housing units, and current average total assessed values of non-residential space. These variables were applied to generate estimated taxes (Revenue) for each scenario, based on 2007 dollars. A brief description of each is provided below.

Mileage Rates

Mileage rates were provided by Chambersburg Borough and are current for 2007 tax year. The rates include the Chambersburg Area School District of 76.91 mils, Chambersburg Borough rate of 20.0 mils, a Franklin County Tax Rate of 21.15 mils, and a Franklin County Library rate of 0.6 mils. The taxes are applied to assessed values as follows: for every \$1,000 of assessed value \$7.69 is levied for School Taxes, \$2.00 is levied for Chambersburg Borough Taxes, \$2.12 is levied for Franklin County, and \$.06 is levied for Franklin County Library System.

Average Assessed Value per New Residential Properties

Average assessed value on new residential properties assumes that the sale price of residential properties will also be the assessed value of the properties. Based on 2006 trends, refer to Table 5: 2006 Home Sale Price Chambersburg Borough (ZIP Code 17201); the average assessed value per property will be \$199,917 per unit.

Average Assessed Value per Non-residential Properties

Due to the structure of the Franklin County Tax Assessment Office datasets, the actual square footage of structures on non-residential properties is not readily available, but the actual total assessed values for the number of non-residential properties is available. Table 16: Non-residential Improved Assessed Values include the non-residential assessed value in Chambersburg Borough as of January 2006. The data provided background information concerning assessed values on non-residential properties in the Borough.

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Table 14: Non-residential Improved Assessed Values

Land Use Type (Tax Assessment Office)	Land Use Code (Tax Assessment Office)	Number of Properties	Assessed Value (Land + Improved)	Use as a Percent of All Properties*	Use as a Percent of Total Assessed Value**
	Commercial	940	\$ 113,447,600	12.9%	52.5%
C	Commercial	147	\$ 5,327,520	2.0%	7.1%
CA	Commercial Quality A	147	\$ 8,322,400	2.0%	3.8%
CB	Commercial Quality B	18	\$ 2,754,790	0.2%	1.3%
CC	Commercial Quality C	179	\$ 10,202,660	2.5%	4.7%
CG	Commercial Garage/Lot	16	\$ 456,870	0.2%	0.2%
CL	Commercial Lot	8	\$ 50,730	0.1%	0.0%
CO	Office	161	\$ 13,105,010	2.2%	6.1%
CR	Retail	32	\$ 2,264,150	0.4%	1.0%
CS	Service	53	\$ 5,084,660	0.7%	2.4%
CW	Warehouse	41	\$ 6,415,710	0.6%	3.0%
CX	Exempt	138	\$ 49,463,100	1.9%	22.9%
	Industrial	34	\$ 9,698,490	0.5%	4.5%
I	Industrial	34	\$ 9,698,490	0.5%	4.5%
	Residential / Commercial	134	\$ 1,556,840	1.8%	0.7%
RC	Residential / Commercial	44	\$ 1,294,860	0.6%	0.6%
RO	Residential / Office	90	\$ 261,980	1.2%	0.1%
Total		1,108	\$ 124,702,930	15.3%	57.7%

Average Commercial Properties Assessment	\$ 120,689
Average Industrial Properties Assessment	\$ 285,250

Source: Franklin County Tax Assessment Office via Chambersburg Borough, 2006.

Table 14: indicates that on average commercial properties in Chambersburg Borough have a total assessed value of \$120,689 and an industrial property has an average total assessed value of \$285,250; note that these values are total assessed value which includes land assessment as well as improved (structure) assessment.

The Franklin County Tax Assessment Office has provided estimate assessed values per square foot for non-residential properties as presented in Table 15: Estimate Assessed Values of Non-Residential Properties. The data in Table 15 are truly estimates as there are numerous factors associated with assessment that can skew data including location, building condition, age of structure, and structure layout, among others. Data from Table 15 were used to estimate potential revenue generated from Non-residential properties.

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Table 15: Estimate Assessed Values of Non-Residential Properties

Type of Use	Estimate Assessed Value Per Square Foot of Structure	Value Used for Build-Out Scenarios
Commercial		
<i>Hotels – Restaurants</i>	\$14 - \$18	\$16
<i>Small Scale (Similar to Downtown)</i>	\$5 - \$10	\$7.50
Industrial		
<i>Warehouse (Large)</i>	\$4	\$4

Source: Franklin County Assessment Office

Potential Residential Impacts (Revenue)

Tables 16: Potential Residential Fiscal Impacts-Revenue provides the estimated fiscal impacts of the projected residential development. Data used for the estimates are based on data presented in Table 8: Residential Totals Based on Land Available for Development & Redevelopment.

Tables 16: Potential Residential Fiscal Impacts - Revenue

Variables	Year 2007 Adjustment Based on Table A	Pending Development Based on Proposed Units Table B (TOTAL UNITS)	Difference Between Year 2007 and Pending Development	Probable Build-Out Based on Allowable Units Table C (Town House Scenario)	Difference Between Year 2007 and Probable Build-Out	Alternate Build-Out (Probable Build-Out Plus Additional Units)	Difference Between Year 2007 and Alternate Build-Out
Population	20,494	21,000	506	26,473	5,978	29,120	8,120
Housing Units	8,872	9,091	219	11,460	2,588	12,606	3,734

Average Assessed Value per New Unit (2006)	\$199,917						
Net Assumed Total Assessed Value of New Units			\$ 43,781,823		\$ 517,385,196		\$ 746,502,401

Potential Revenue*	Rate						
School District Taxes (2007-2008 Rate)	76.91 Mills		\$ 336,726		\$ 3,979,210		\$ 5,741,350
Borough Taxes (2007 Rate)	20 Mills		\$ 87,564		\$ 1,034,770		\$ 1,493,005
Subtotal			\$ 424,290		\$ 5,013,980		\$ 7,234,355
Franklin County Taxes (2007 Rate)	21.15 Mills		\$ 92,599		\$ 1,094,270		\$ 1,578,853
Franklin County Library (2007 Rate)	0.6 Mills		\$ 2,627		\$ 31,043		\$ 44,790
Subtotal			\$ 95,225		\$ 1,125,313		\$ 1,623,643
Potential Total Revenue Generated	118.66 Mills		\$ 519,515		\$ 6,139,293		\$ 8,857,997

* Based on Chambersburg Area School District 2007-2008 Real Estate Tax Rate; and Chambersburg Borough 2007 Real Estate Tax Rate, Franklin County 2007 Tax Rate, and Franklin County Library System Tax Rate of 2007.
Source: Chambersburg Borough, Franklin County Assessment Office, Chambersburg Area School District.

Table 16: Potential Residential Fiscal Impacts – Revenue illustrates the projected additional 219 pending housing units provide an assumed total assessed value of \$43.8 million, and could generate approximately \$337,000 in school taxes, approximately \$88,000 in Chambersburg Borough taxes, approximately \$92,600 in Franklin County taxes, and approximately \$2,600 in Franklin County Library taxes, for a combined approximate \$520,000 in total taxes.

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The table also illustrates that the 2,588 new units under the Probable Build-Out could provide an assumed total assessed value of \$517.4 million, could generate approximately \$4.0 million in school taxes, approximately \$1.0 million in Chambersburg Borough taxes, approximately \$1.1 million in Franklin County taxes, and approximately \$31,000 in Franklin County Library taxes, for a combined approximate \$6.1 million in total taxes.

Under the Alternate Build-Out Scenario, the table illustrates that the 3,734 units could provide an assumed total assessed value of \$746.5 million, could generate \$5.7 million in school taxes, approximately \$1.5 million in Chambersburg Borough taxes, approximately \$1.6 million in Franklin County taxes, and approximately \$45,000 in Franklin County Library taxes, for a combined approximate \$8.9 million in total taxes.

Table 17: Sample Taxes for a Single Home, illustrates taxes paid (revenue generated) by a single dwelling unit which is assessed at \$200,000. The table has been provided for comparative purposes. As table 19 illustrates the owner of the property assessed at \$200,000 is expected to pay approximately \$2,400 per year in taxes.

Table 17: Sample Taxes for a Single Home

Type of Tax	Tax Rate	Potential Revenue Generated from a Home Assessed at \$200,000
School District Taxes (2007-2008 Rate)	76.91 Mils	\$ 1,538
Borough Taxes (2007 Rate)	20 Mils	\$ 400
Subtotal		\$ 1,938
Franklin County Taxes (2007 Rate)	21.15 Mils	\$ 423
Franklin County Library (2007 Rate)	0.6 Mils	\$ 12
Potential Total Revenue Generated*	118.66 Mills	\$ 2,373

**Based on Chambersburg Area School District 2007-2008 Real Estate Tax Rate; and Chambersburg Borough 2007 Real Estate Tax Rate, Franklin County 2007 Tax Rate, and Franklin County Library System Tax Rate of 2007.*

Source: Chambersburg Borough, Franklin County Assessment Office, Chambersburg Area School District.

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Potential Non-Residential Impacts (Revenue)

Table 18: Potential Non-Residential Fiscal Impacts- Assessed Values and Tables 19-21: Potential Non-Residential Fiscal Impacts- Revenue (New Development, Redevelopment and Total) provide the estimated fiscal impacts of projected non residential development by Zoning District. Data used for the estimates are based on data presented in Table 13: Non-Residential Build-Out Results.

Tables 18: Potential Non-Residential Fiscal Impacts – Assessed Values

Zoning District	Total Acres Available	Total Acres Available Less 5 Percent - Assumed for Infrastructure Development	Acres Available to Develop - "Building Area"	Potential Square Footage	Estimate Assessed Value Per Square Foot of Structure	Estimate Improved Assessed Value Based on Assessed Value Per Square Foot of Structure
Parcels Zoned PO	19.8	18.8	12.2	1,064,237	\$ 16.00	\$ 17,027,786
Parcels Zoned DCH	142.9	135.8	88.3	5,767,382	\$ 16.00	\$ 92,278,104
Parcels Zoned HM	56.8	54.0	54.0	3,527,429	\$ 4.00	\$ 14,109,714
Parcels Zoned MM	15.3	14.5	14.5	948,513	\$ 7.50	\$ 7,113,845
Subtotal - New Development	234.8	223.1	169.0	11,307,559	~	\$ 130,529,450
Redevelopment Parcels Zoned CC	5.4	NA	5.4	233,547	\$ 7.50	\$ 1,751,602
Redevelopment Parcels Zoned HM	11.8	NA	11.8	772,796	\$ 7.50	\$ 5,795,968
Redevelopment Parcels: Built As Commercial Using Zone DCH	53.0	NA	34.5	2,252,331	\$ 16.00	\$ 36,037,289
Subtotal - Redevelopment	70.2		51.7	3,258,673	~	\$ 43,584,859
Total	305.1	223.1	220.6	14,566,233	~	\$ 174,114,309

Based on average assessed value per square foot

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Tables 19: Potential Non-Residential Fiscal Impacts – Revenue- New Development

Professional Office	Assessed Value =	\$	17,027,786
School District Taxes (2006-2007 Rate of 76.91 Mils)		\$	130,961
Borough Taxes (2007 Rate of 20 Mils)		\$	34,056
Subtotal		\$	165,016
Franklin County Taxes (2007 Rate 21.15 Mils)		\$	36,014
Franklin County Library (2007 Rate 0.6 Mils)		\$	1,022
Subtotal		\$	37,035
Total		\$	202,052
Distributive Commercial Highway	Assessed Value =	\$	92,278,104
School District Taxes (2006-2007 Rate of 76.91 Mils)		\$	709,711
Borough Taxes (2007 Rate of 20 Mils)		\$	184,556
Subtotal		\$	894,267
Franklin County Taxes (2007 Rate 21.15 Mils)		\$	195,168
Franklin County Library (2007 Rate 0.6 Mils)		\$	5,537
Subtotal		\$	200,705
Total		\$	1,094,972
Heavy Manufacturing	Assessed Value =	\$	14,109,714
School District Taxes (2006-2007 Rate of 76.91 Mils)		\$	108,518
Borough Taxes (2007 Rate of 20 Mils)		\$	28,219
Subtotal		\$	136,737
Franklin County Taxes (2007 Rate 21.15 Mils)		\$	29,842
Franklin County Library (2007 Rate 0.6 Mils)		\$	847
Subtotal		\$	30,689
Total		\$	167,426
Medium Manufacturing	Assessed Value =	\$	7,113,845
School District Taxes (2006-2007 Rate of 76.91 Mils)		\$	54,713
Borough Taxes (2007 Rate of 20 Mils)		\$	14,228
Subtotal		\$	68,940
Franklin County Taxes (2007 Rate 21.15 Mils)		\$	15,046
Franklin County Library (2007 Rate 0.6 Mils)		\$	427
Subtotal		\$	15,473
Total		\$	84,413
GRAND TOTAL Revenue from New Development*		\$	1,548,862

* Based on Chambersburg Area School District 2007-2008 Real Estate Tax Rate; and Chambersburg Borough 2007 Real Estate Tax Rate, Franklin County 2007 Tax Rate, and Franklin County Library System Tax Rate of 2007.
Source: Chambersburg Borough, Franklin County Assessment Office, Chambersburg Area School District.

Table 19: Potential Non-Residential Fiscal Impacts – Revenue – New Development illustrates that the projected additional 11.3 million square feet of non-residential development (Table 18) could generate \$1.5 million in taxes.

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Tables 20: Potential Non-Residential Fiscal Impacts – Revenue- Redevelopment

Redevelopment - Central Core*	Assessed Value =	\$ 1,751,602
School District Taxes (2006-2007 Rate of 76.91 Mils)	\$	13,472
Borough Taxes (2007 Rate of 20 Mils)	\$	3,503
Subtotal	\$	16,975
Franklin County Taxes (2007 Rate 21.15 Mils)	\$	3,705
Franklin County Library (2007 Rate 0.6 Mils)	\$	105
Subtotal	\$	3,810
Total	\$	20,785
Redevelopment – Heavy Manufacturing	Assessed Value =	\$ 5,795,968
School District Taxes (2006-2007 Rate of 76.91 Mils)	\$	44,577
Borough Taxes (2007 Rate of 20 Mils)	\$	11,592
Subtotal	\$	56,169
Franklin County Taxes (2007 Rate 21.15 Mils)	\$	12,258
Franklin County Library (2007 Rate 0.6 Mils)	\$	348
Subtotal	\$	12,606
Total	\$	68,775
Redevelopment - Commercial as DCH	Assessed Value =	\$ 36,037,289
School District Taxes (2006-2007 Rate of 76.91 Mils)	\$	277,163
Borough Taxes (2007 Rate of 20 Mils)	\$	72,075
Subtotal	\$	349,237
Franklin County Taxes (2007 Rate 21.15 Mils)	\$	76,219
Franklin County Library (2007 Rate 0.6 Mils)	\$	2,162
Subtotal	\$	78,381
Total	\$	427,618
GRAND TOTAL Revenue from Redevelopment**	\$	517,178

*Includes only the commercial area from the Central Core District (first floor of identified Opportunity Sites)

** Based on Chambersburg Area School District 2007-2008 Real Estate Tax Rate; and Chambersburg Borough 2007 Real Estate Tax Rate, Franklin County 2007 Tax Rate, and Franklin County Library System Tax Rate of 2007.
Source: Chambersburg Borough, Franklin County Assessment Office, Chambersburg Area School District.

Table 20: Potential Non-Residential Fiscal Impacts – Revenue – Redevelopment illustrates that the projected additional 3.6 million square feet of non-residential redevelopment (Table 18) could generate approximately \$517,000 in taxes.

Tables 21: Potential Non-Residential Fiscal Impacts – Revenue

TOTALS	Assessed Value =	\$ 174,114,309
School District Taxes (2006-2007 Rate of 76.91 Mils)	\$	1,339,113
Borough Taxes (2007 Rate of 20 Mils)	\$	348,229
Subtotal	\$	1,687,342
Franklin County Taxes (2007 Rate 21.15 Mils)	\$	368,252
Franklin County Library (2007 Rate 0.6 Mils)	\$	10,447
Subtotal	\$	378,699
GRAND TOTAL REVENUE*		
New Development and Redevelopment	\$	2,066,040

* Based on Chambersburg Area School District 2007-2008 Real Estate Tax Rate; and Chambersburg Borough 2007 Real Estate Tax Rate, Franklin County 2007 Tax Rate, and Franklin County Library System Tax Rate of 2007.
Source: Chambersburg Borough, Franklin County Assessment Office, Chambersburg Area School District.

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Table 21: Potential Non-Residential Fiscal Impacts - Revenue illustrates the projected additional 14.6 million square feet of non-residential development and redevelopment (Table 18) could generate approximately \$2.1 million in total taxes.

Potential Net Impacts (Revenue)

Table 22: Potential Net Impacts- Revenue provides the estimated net fiscal impacts of the projected residential and non-residential development. Data used for the estimates are based on data presented in previous sections. Data from Table 22: Potential Net Impacts- Revenue is used for Revenue versus cost analysis.

Table 22: Potential Net Impacts- Revenue

Variables	Year 2007 Adjustment Based on Table A	Pending Development Based on Proposed Units Table B (TOTAL UNITS)	Difference Between Year 2007 and Pending Development	Probable Build-Out Based on Allowable Units Table C (Town House Scenario)	Difference Between Year 2007 and Probable Build-Out	Alternate Build-Out Based (Probable Build-Out Plus Additional Units)	Difference Between Year 2007 and Alternate Build-Out
Population	20,494	21,093	506	26,473	5,978	29,120	8,120
Housing Units	8,872	9,131	219	11,460	2,588	12,606	3,734

Potential Revenue Generated from RESIDENTIAL Uses							
	Rate						
School District Taxes (2007-2008 Rate)	76.91 Mils		\$ 336,726		\$ 3,979,210		\$ 5,741,350
Borough Taxes (2007 Rate)	20 Mils		\$ 87,564		\$ 1,034,770		\$ 1,493,005
Subtotal			\$ 424,290		\$ 5,013,980		\$ 7,234,355
Franklin County Taxes (2007 Rate)	21.15 Mils		\$ 92,599		\$ 1,094,270		\$ 1,578,853
Franklin County Library (2007 Rate)	0.6 Mils		\$ 2,627		\$ 31,043		\$ 44,790
Subtotal			\$ 95,225		\$ 1,125,313		\$ 1,623,643
TOTAL Potential Revenue from RESIDENTIAL USES	118.66 Mils		\$ 519,515		\$ 6,139,293		\$ 8,857,997

Potential Revenue Generated From NON-RESIDENTIAL Uses							
	Square footage of Non-residential Space			11,307,559		14,566,233	
Chambersburg Area School District	76.91 Mils				\$ 1,003,902		\$ 1,339,113
Chambersburg Borough	20 Mils				\$ 261,059		\$ 348,229
Subtotal					\$ 1,264,961		\$ 1,687,342
Franklin County	21.15 Mils				\$ 276,070		\$ 368,252
Franklin County Library System	0.6 Mils				\$ 7,832		\$ 10,447
Subtotal					\$ 283,902		\$ 378,699
TOTAL Potential Revenue from NON-RESIDENTIAL Uses					\$ 1,548,862		\$ 2,066,040

TOTAL POTENTIAL REVENUE							
Chambersburg Area School District	76.91 Mils		\$ 336,726		\$ 4,983,112		\$ 7,080,463
Chambersburg Borough	20 Mils		\$ 87,564		\$ 1,295,829		\$ 1,841,233
Subtotal			\$ 424,290		\$ 6,278,941		\$ 8,921,697
Franklin County	21.15 Mils		\$ 92,599		\$ 1,370,339		\$ 1,947,104
Franklin County Library System	0.6 Mils		\$ 2,627		\$ 38,875		\$ 55,237
Subtotal			\$ 95,225		\$ 1,409,214		\$ 2,002,341
TOTAL			\$ 519,515		\$ 7,688,155		\$ 10,924,038

Source: Chambersburg Borough, Franklin County Assessment Office, Chambersburg Area School District, and results of Build-out Process.

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Table 22: Potential Net Impacts- Revenue indicates that the Pending Development's net revenue (residential and non-residential development) is approximately \$520,000; the Probable Future Build-Out yields approximately \$7.7 million, and the Alternate Build-Out yields approximately \$10.9 million. Chambersburg Borough would increase its revenue by approximately \$104,000 under pending development and \$1.3 million under Probable Build-Out and \$1.8 million under the Alternate Build-Out. There are however expenses that come with development, some of which are addressed below.

School District Impacts

Current (2006-2007) enrollment in the Chambersburg Area School District is 8,418 students and according to Chambersburg Area School District there is no way to determine the percentage of the total enrollment that are from Chambersburg Borough only, as students are permitted to "cross-enroll" between school districts. Therefore, school aged children data (from Table 3: Population / Housing Adjustment) are used to analyze school district costs.

According to 2006 Chambersburg Area School District data, the Chambersburg Area School District operating budget was approximately \$81.3 million (\$81,311,575) where 59.37% of the budget was derived from local taxes, 37.46% of the budget was provided by State funds and 3.17% was provided by Federal funds. The education cost (expenditure) per student was \$9,680. The cost per student multiplied by the number of school aged children provides an estimate costs to the school district per build-out scenario, as presented in Tables 23: Overall Potential School District Impact – Cost and Table 24: Potential School District Impact by Scenario - Costs.

Table 23: Overall Potential School District Impact – Cost

Variables	Year 2000 Total	Year 2007 Adjustment Based on Table A	Pending Development Based on Proposed Units Table B	Probable Build-Out Based on Allowable Units Table C (Town House Scenario)	Difference Between Year 2007 and Probable Build-Out	Alternate Build-Out (Probable Build-Out Plus Additional Units)	Difference Between Year 2007 and Alternate Build-Out
Total Population	17,862	20,494	21,000	26,473	5,978	29,120	8,626
School Aged Population (17.3% of Total Population)	3,090	3,546	3,633	4,580	1,034	5,038	1,492
Cost to Educate A Student Per Year (\$9,680 2007 Dollars)	\$ 29,912,420	\$34,320,608	\$ 35,167,792	\$ 44,332,075	\$ 10,011,467	\$ 48,765,521	\$ 14,444,913

Source: Chambersburg Borough, Chambersburg Area School District, and results of Build-out Process.

Table 24: Potential School District Impact by Scenario - Costs

Additional Dwelling or Students	Pending Development Based on Proposed Units	Probable Build-Out Based on Allowable Units Table C (Town House Scenario)	Alternate Build-Out (Probable Build-Out Plus Additional Units)
New Dwelling Units	219	2,588	3,734
New Students	88	1,034	1,492
Additional Costs Based on Cost to Educate Student Per Year (\$9,680 in 2007 Dollars)	\$ 847,184	\$ 10,011,467	\$ 14,444,913

Source: Chambersburg Borough, Chambersburg Area School District, and results of Build-out Process.

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In 2005-2006 the Chambersburg Area School District operating budget was approximately \$81.3 million, according to Table 24: Potential School District Impact by Scenario – Costs, the additional cost to the school district for pending developments will increase by approximately \$847,000; and under the Probable Build-Out Scenario will increase by approximately \$10.0 million; and under the Alternate Build-Out scenario may increase by approximately \$14.4 million.

Table 25: Potential Net Impact to Chambersburg School District

Variable	Pending Development Scenario	Probable Build-Out Scenario	Alternate Build-Out Scenario
Total Potential Additional Costs to School District: Based on Cost to Educate Students Per Year (\$9,680 in 2007 Dollars)	\$ 847,184	\$ 10,011,467	\$ 14,444,913
Amount of Cost to Educate Students Derived from Local Taxes (59.37% of Total)	\$ 499,838	\$ 5,906,765	\$ 8,522,499
Potential Revenue From Build-Out Scenarios: Chambersburg Area School District	\$ 336,726	\$ 4,983,112	\$ 7,080,463
<i>Difference (Potential Revenue minus Amount of Cost to Educate Students Derived from Local Taxes)</i>	\$ (163,112)	\$ (923,654)	\$ (1,442,035)

Source: Chambersburg Borough, Chambersburg Area School District, and results of Build-out Process.

Table 25: Potential Net Impact to Chambersburg School District illustrates that based on the revenue received from new development and the cost to educate each student per year results in a deficit of approximately \$163,000 under pending development, approximately \$924,000 under the Probable Build-Out Scenario and approximately \$1.4 million under the Alternate Build-Out Scenario. Other changes that may impact the school district include an increase in cost to educate students, a greater percentage of students entering the district from areas outside of Chambersburg Borough, a greater percentage of Chambersburg Borough new residents attending the school district than currently estimated, and a change in the district facility's capacities. Further consideration for school district impacts would be prudent.

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Municipal Impacts

Potential municipal impacts of an Alternate build-out are numerous. The following road, and police and emergency services costs are provided for example purposes only, as several assumptions are made when providing impact estimates. An impact on Parks and Recreation Facilities are also provided.

Streets and Roads

Table 26: New Road Construction Costs and Table 27: Existing Road Reconstruction Costs are based on data provided by Chambersburg Borough and JMT estimates for the construction of a new two-lane one-mile road. According to the estimates, a new two-lane one-mile road with water and sewer service would cost, at a minimum, approximately \$2.1 million per mile (\$2,053,553). The minimum estimated costs for the reconstruction / rehabilitation of an existing road is a minimum of approximately \$530,000 (\$530,880) excluding water and sewer improvements. For comparison, Rowland Avenue which was recently rehabilitated cost approximately \$2.0 million per mile (\$2,010,125) excluding any water and sewer improvements. Note that Rowland Avenue rehabilitation did include some curb, sidewalk, and crosswalk improvements. With a projected additional 1,050 housing units (Probable Build-Out Scenario), new road construction and rehabilitation of existing roads is eminent.

Table 26: New Road Construction Costs

New Road Feature	Linear Distance (feet)	Width (feet)	Number Per Mile	Cost*	Approximate Total Cost per Mile
New Road Construction*	5,280	32	NA	\$35.50	\$666,453
New Structure (Bridge) Construction*	20	32	4	\$245	\$627,200
Water Service (Main Lines)	5,280	NA	NA	\$50	\$264,000
Sewer Service (Main Lines)***	5,280	NA	NA	\$80	\$422,400
Sewer Service (Man-holes)**	5,280	NA	21	\$3,500	\$73,500
Total	1 Mile	Two – lanes			\$2,053,553

*Approximate Cost per Square Yard, includes materials plus overhead and labor cost estimates.

**One every 250 feet, which is the average distance needed for line inspection, maintenance, and repair.

Note: estimates are in 2007 dollars.

Source: Chambersburg Borough 2007 Budget and JMT.

Table 27: Existing Road Reconstruction Costs

Existing Road Feature	Linear Distance (feet)	Width (feet)	Number Per Mile	Cost*	Approximate Total Cost per Mile
Resurface Existing Road*	5,280	36	NA	\$11.50	\$242,880
Existing Structure (Bridge) Rehabilitation*	20	36	4	\$100	\$288,000
Total	1 Mile	Two - lanes			\$530,880

*Approximate Cost per Square Yard, includes materials plus overhead and labor cost estimates.

**Assumes four per mile, JMT minimum estimate.

Note: estimates are in 2007 dollars.

Source: Chambersburg Borough 2007 Budget and JMT.

Several other costs not included in these estimates which increase overall costs of construction include design costs, roadway drainage costs, property acquisition costs, environmental mitigation costs, signalization, and other unknown factors. Design costs range from ten to twenty percent of total costs, drainage costs vary depending on topography and design; and property acquisition costs depend on several factors including current land use, future land use and location. Environmental mitigation costs may include wetlands creation, monitoring wells,

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and impact assessments or statements. Signalization costs may include new signal purchases, or synchronization of existing traffic signals. Unknown factors are those factors not anticipated that are discovered during construction or rehabilitation and can include archeological discovery, karsts or limestone geology, structures being in poorer condition than anticipated, and material availability and cost fluctuations.

Police and Emergency Services

Table 28: Cost of Police & Emergency Services for Chambersburg Borough illustrates estimates to provide services to citizens of the Borough. The tables estimate, for 2007 the per capita expenditure to provide police and emergency services based on the budgeted amount of municipal funding to provide these services divided by the total population of the Borough. Future expenditure for services is calculated by multiplying the calculated 2007 per capita expenditure by the total projected population.

In Chambersburg Borough, based on 2007 per capita expenditure, the estimated expenditure to provide police and emergency services for pending development is approximately \$6.9 million, under the Probable Build-Out Scenario is \$8.7 million, and under the Alternate Build-Out Scenario is approximately \$9.6 million. The estimates are based on 2007 dollars and assume no change in current police and emergency services, or costs to provide police and emergency services, or change in the Borough's current commitment to receive these services.

Table 28: Cost of Police & Emergency Services

Service*	2007		Estimated Expenditure to Provide Services for	Estimated Expenditure to Provide Services for	Estimated Expenditure to Provide Services for
	Budgeted Amount*	Calculated Per Capita Expenditure to Provide Service	Pending Development	Probable Build-Out	Alternate Build-Out
Police	\$3,946,950	\$193	\$ 4,062,173	\$ 5,116,087	\$ 5,624,050
Emergency Services (Fire, Ambulance, Fire Code)	\$2,766,065	\$135	\$ 2,846,815	\$ 3,585,409	\$ 3,941,395
Total	\$6,713,015	\$328	\$ 6,908,988	\$ 8,701,496	\$ 9,565,445
Population**	20,494	NA	21,093	26,565	29,203

*Using 2007 budgeted amount to determine per capita for Chambersburg Borough although service areas extend beyond the Borough.

**Population based on residential permits since 1999 with an average 2.31 persons per unit ratio applied, or as described in the text.

Parks and Recreation Facilities

Parks, recreation and open space, as described and illustrated in the Community Facilities and Services section of the Existing Condition Report of the Comprehensive Plan, indicate that there is currently approximately 137 acres of parks, open space, and recreational areas (including School areas) in Chambersburg Borough. The Existing Land Use section of the Existing Conditions Report indicates approximately 65 acres (64.7 acres) of parks and recreation land (excluding school areas). In order to determine the impact of development and ability of parks, recreation, and open space to meet population demands (in terms of space needed not necessarily activities provided) the following are provided.

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The following table provides standards for various types of park and recreation facilities based on data provided by the National Park Recreation Association. The data are provided by type of facility and minimum acreage of park suggested to sustain a population, the data are provide as a rate (size of park suggested per 1,000 population).

Table 29: Suggested Park Sizes by Park Type

Facility Type	Standards	
	Recommended Size	Formula
Regional Park	250 Acres	5 Acres/1,000
Community Park	20 Acres	3 Acres/1,000
Neighborhood Park	5 Acres	5 Acres/1,000

Source: National Park and Recreation Association

The Chambersburg Comprehensive Recreation, Park and Open Space Plan and Master Site Plan for the Mike Waters Memorial Park, suggests (Section 4- Recreation Lands and Facility Inventory and Analysis) that community parks are typically 20-100 acres in size and neighborhood parks are typically 5-15 acres in size; the suggested park size from the Recreation, Park and Open Space Plan and Master Site Plan concur with the suggested park sizes in Table 29: however, the park sizes suggested in Table 29 would be considered as minimum park sizes needed.

Table 30: Chambersburg Parks, Recreation and Open Space Needed Based on National Parks and Recreation Association Suggested Park Sizes

Variables		Year 2000 Total	Year 2007 Adjustment Based on Table A	Pending Development Based on Proposed Units Table B	Probable Build-Out Based on Allowable Units Table C (Town House Scenario)	Alternate Build-Out (Probable Build-Out Plus Additional Units)
Park Land Available	Population	17,862	20,494	21,000	26,473	29,120
	Existing <i>Per Capita Square footage</i> of Parks Recreation and Open Space Based on Total Park, Recreation, and Open Space Acreage: 136.7 Acres	333.5	290.7	283.7	225.0	204.6
	Existing <i>Per Capita Square footage</i> of Parks Recreation and Open Space Based on Existing Land Use (Excluding Schools): 64.7 Acres	157.8	137.5	134.2	106.5	96.8
	Existing <i>Per Capita Square footage</i> of Parks Recreation and Open Space Based on Existing Land Use plus new parks (Gabler, Sunny Hill, Nicholson Square) Excluding Schools: 84.2 Acres	205.3	179.0	174.7	138.5	126.0
Park Land Needed	<i>Suggested Acreage Needed Based on National Park and Recreation Association's Park Sizes (Table 29)</i>	<i>Square footage Needed per Capita to meet minimum National Park and Recreation Association's Average</i>				
	Regional Park - 5 Acres / 1,000	89.3	102.5	105.0	132.4	145.6
	Community Park – 3 Acres / 1,000	53.6	61.5	63.0	79.4	87.4
	Neighborhood Park - 5 Acres / 1,000	89.3	102.5	105.0	132.4	145.6

Source: National Parks and Recreation Association, Chambersburg Borough, and results of Build-out Process.

Table 30, suggests that the per capita park space currently available meets the minimum National Parks and Recreation Associations standards for existing conditions, pending development; however based on Probable Build-Out and Alternate Build-Out the amount of park

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and recreation space per capital meets minimum standards only if school related areas are included in the equation. For instance, under the Alternate Build-Out, there are approximately 205 square feet of parks and recreation space using school related facilities and approximately 97 square feet of space using parks related space only; and according to National Park and Recreation Association's standards there should be at a minimum 145.6 square feet of parks and recreation per capita for regional or neighborhood parks.

Water and Sewer Service Facilities

Water and sewer services and their conveyance system will be impacted by each of the build-out scenarios. The following table presents potential revenue generated by the residential portion of the build-out scenarios. Non-residential revenue were not calculated as the impact will vary depending on the type of non-residential development that occurs; for instance a deli store versus a truck washing station versus a manufacturing company that uses a lot of water in its processes. The per dwelling unit connection fees, used in projecting the revenue were provided by Chambersburg Borough and are current as of October 2007. Note that the potential revenue generated per dwelling unit for water and sewer services were not included in the net revenue of Chambersburg Borough as the revenues are directed toward the authorities of the service providers. Note also that the build-out scenarios assume that there are adequate capacities and conveyance systems to meet the demands as projected in the build-out scenarios. Further information concerning capacities and conveyance systems are described in the Chambersburg Borough Act 537 Wastewater Treatment Plan.

Table 31: Potential Water and Sewer Connection Revenue

Type of Service	2007	Estimated Revenue to Connect for	Estimated Revenue to Connect for	Estimated Revenue to Connect for
	Cost Per Dwelling Unit to Connect to Conveyance System	Pending Development	Probable Build-Out	Alternate Build-Out
Water Service	\$2,522	\$ 552,318	\$ 6,526,936	\$ 9,417,303
Sewer Service	\$2,548	\$ 558,012	\$ 6,594,224	\$ 9,514,389
Total	\$5,070	\$ 1,110,330	\$13,121,160	\$ 18,931,693
Projected New Housing Units		219	2,588	3,734

Source: Chambersburg Borough and results of Build-out Process.

Table 31: Potential Water and Sewer Connection Revenue, illustrates that the potential revenue for the projected housing units under pending development is approximately \$1.1 million, and under Probable Build-Out is approximately \$13.1 million and under Alternate Build-Out is approximately \$18.9 million.

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Appendix 2: Build-Out Analysis Report
Draft

October 2007

