Charlestown Township - Chester County, PA

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Adopted: December 2, 2013

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# Project Participants

## **Board of Supervisors**

- Frank A. Piliero
- Michael J. Rodgers
- Kevin R. Kuhn
- Charles A. Philips
- Hugh D. Willig

#### Transportation Advisory Committee

- Bill Andersen
- Linda Appler
- Debbie Kuhn
- Rosemary Philips
- Michael Richter
- Fran Rodgers
- Cindy Thompson
- Andre von Hoyer, II

#### Planning Commission

- Wendy G. Leland
- William Westhafer, AIA
- Michael Allen
- Andrew P. Motel, Esq.
- Michael Churchill, Esq.
- Andre von Hoyer, II
- Michael Richter

#### Township Manager/Secretary

• Linda M. Csete

#### **Township Solicitor**

• Mark P. Thompson, Esq.

#### Township Engineer

• Daniel T. Wright, P.E.

## **Transportation Engineer**

• Andy Heinrich, P.E.

## Planning Consultants

Thomas Comitta Associates, Inc. Town Planners & Landscape Architects

- Thomas J. Comitta, AICP, CNU-A, RLA
- Nanci Sarcinello, AICP
- Kelly Gasiewski, Secretary

# Introduction

This Land Use Assumptions Report has been prepared in the context of a Transportation Service Area of 6.8 square miles, as shown in the maps in section 3 of this report. This report was prepared by Thomas Comitta Associates, Inc., Town Planners & Landscape Architects, and the Charlestown Township Transportation Advisory Committee (TAC). The Transportation Advisory Committee members are listed on the Project Participants page.

The information included in this report serves as the basis for a Roadway Sufficiency Analysis prepared by Andy Heinrich, P.E., Transportation Engineer. In addition, this information serves as input to the Transportation Capital Improvements Plan and Program, evolving from the Roadway Sufficiency Analysis.

The Transportation Service Area was defined to encompass properties that are currently undeveloped, and capable of further subdivision, as well as certain developed properties that link the undeveloped and underdeveloped lots. Properties with conservation easements were excluded from the Transportation Service Area, as well as properties that are fully developed.

All the properties within the Transportation Service Area are being studied in the context of 13 intersections that will be impacted in the future, as a result of the developable properties. Properties within the Transportation Service Area were evaluated relative to existing Zoning District boundaries, and related Zoning Ordinance standards and requirements.

The Resolution forming the TAC is included in Appendix A of this report.

The overarching enabling legislation for the Act 209 Transportation Plan is included in Appendix B of this report.

Excerpts of the Charlestown Township Comprehensive Plan of 2001 are included in Appendix C, including Map 5. A Plan for Future Land Use (depicting areas for growth), and Chapter 3, Demographic Profile (describing growth).

The TAC held a Public Hearing on this Act 209 Transportation Plan on November 14, 2013, to present this Land Use Assumptions Report, and to answer questions.

The Charlestown Township Board of Supervisors adopted the Act 209 Transportation Plan – Land Use Assumptions Report by Resolution on December 2, 2013 (see Appendix D.).

# Yield Analysis

A total of 860 properties are within the Transportation Service Area (TSA) of 6.8 square miles. There are 774 residential properties, and 86 nonresidential properties.

Of the 774 residential properties, 572 of them have existing dwelling units. In other words, each of the 572 lots have existing dwellings (one on each property). On these lots, it is unlikely that additional dwelling units would be developed under the current zoning regulations. The 202 residentially zoned properties that could be further developed under existing zoning standards and requirements, could yield 1,230 new dwelling units.

Of the 86 nonresidential properties, 26 have existing nonresidential uses (totally 3,156,138 square feet). On these 26 properties, it is unlikely that additional nonresidential square footage could be built under current zoning. The 60 non-residentially zoned properties that could be further developed under existing zoning standards and requirements, could yield new square footage in the amount of 5,128,307 square feet.

The above calculations were made, considering existing zoning district standards and requirements, including:

- minimum lot area requirements;
- maximum building coverage requirements;
- maximum impervious coverage requirements;
- net-outs for hydrologic features such as flood hazard areas and wetlands; and
- net-outs for topographic features such as very steep slopes.

Therefore, when calculating the impacts to the 13 Intersections within the TSA, the following should be noted:

- + there were 1,969 existing dwelling units, according to the 2010 Census;
- + for the purpose of this report, we have made the assumption that the existing 572 properties housed 1,969 dwelling units;
- + an additional 1,230 new dwelling units could be built on the 202 other properties that are not yet developed, or those that could be further subdivided;
- + there are 3,156,138 square feet of existing nonresidential buildings on 26 properties;
- + there could be 5,128,307 square feet of additional nonresidential buildings on 60 other properties; and
- + of the total nonresidential development build-out of 8,284,445 square feet, approximately 62% remains to be developed.

Please refer to section 3 for the map exhibits.

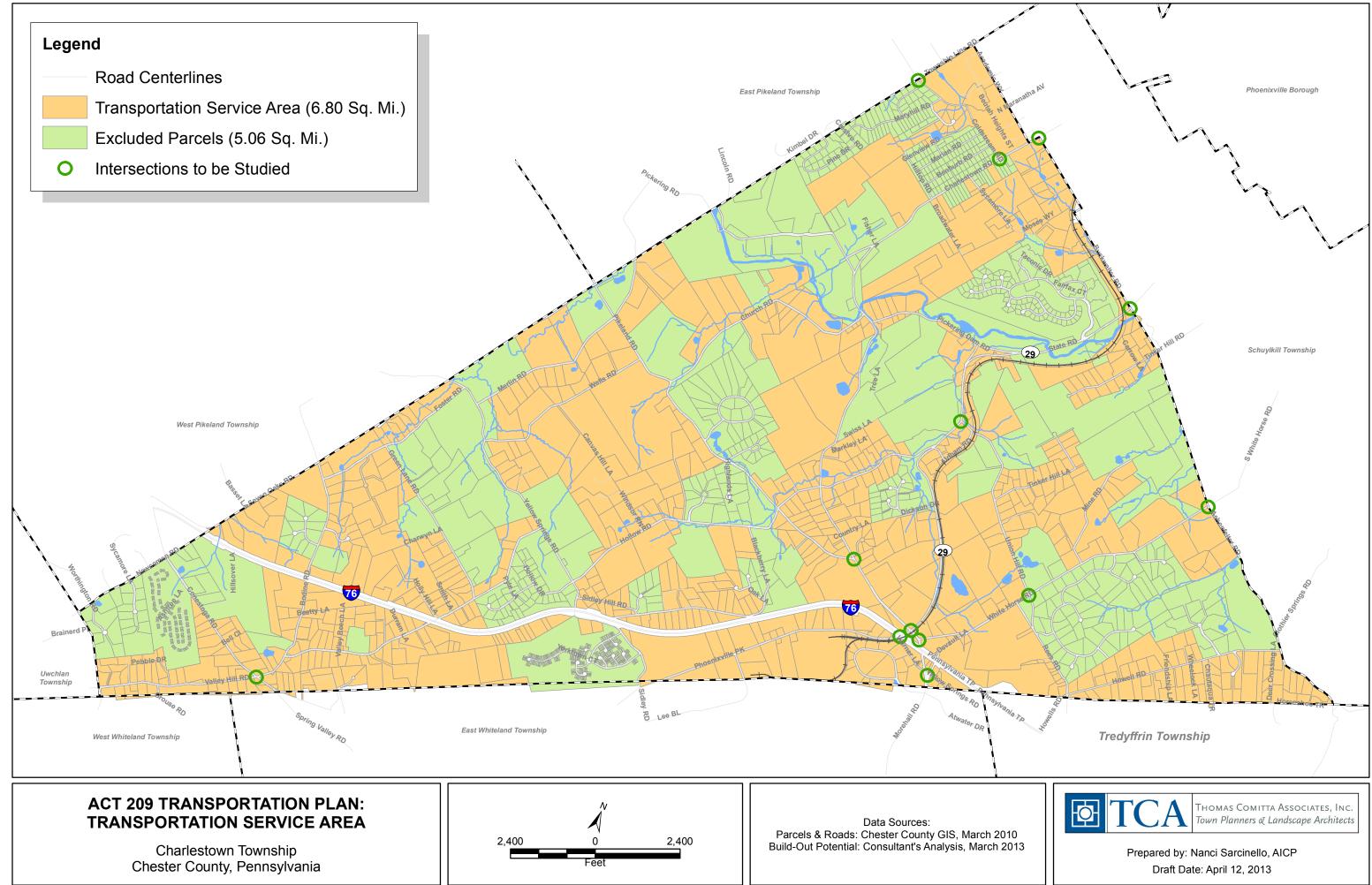
# <u>Mapping</u>

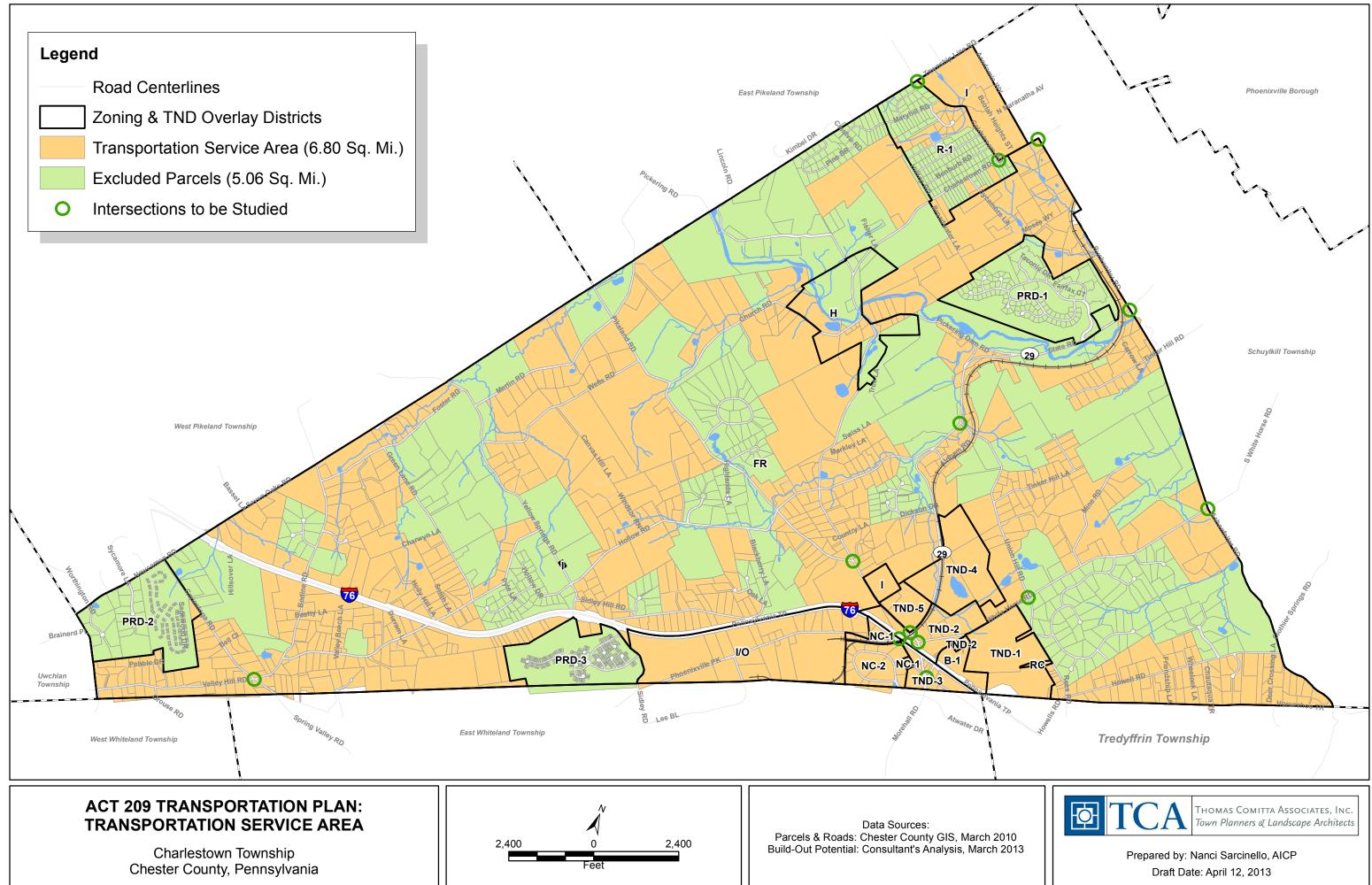
The four maps in this section include:

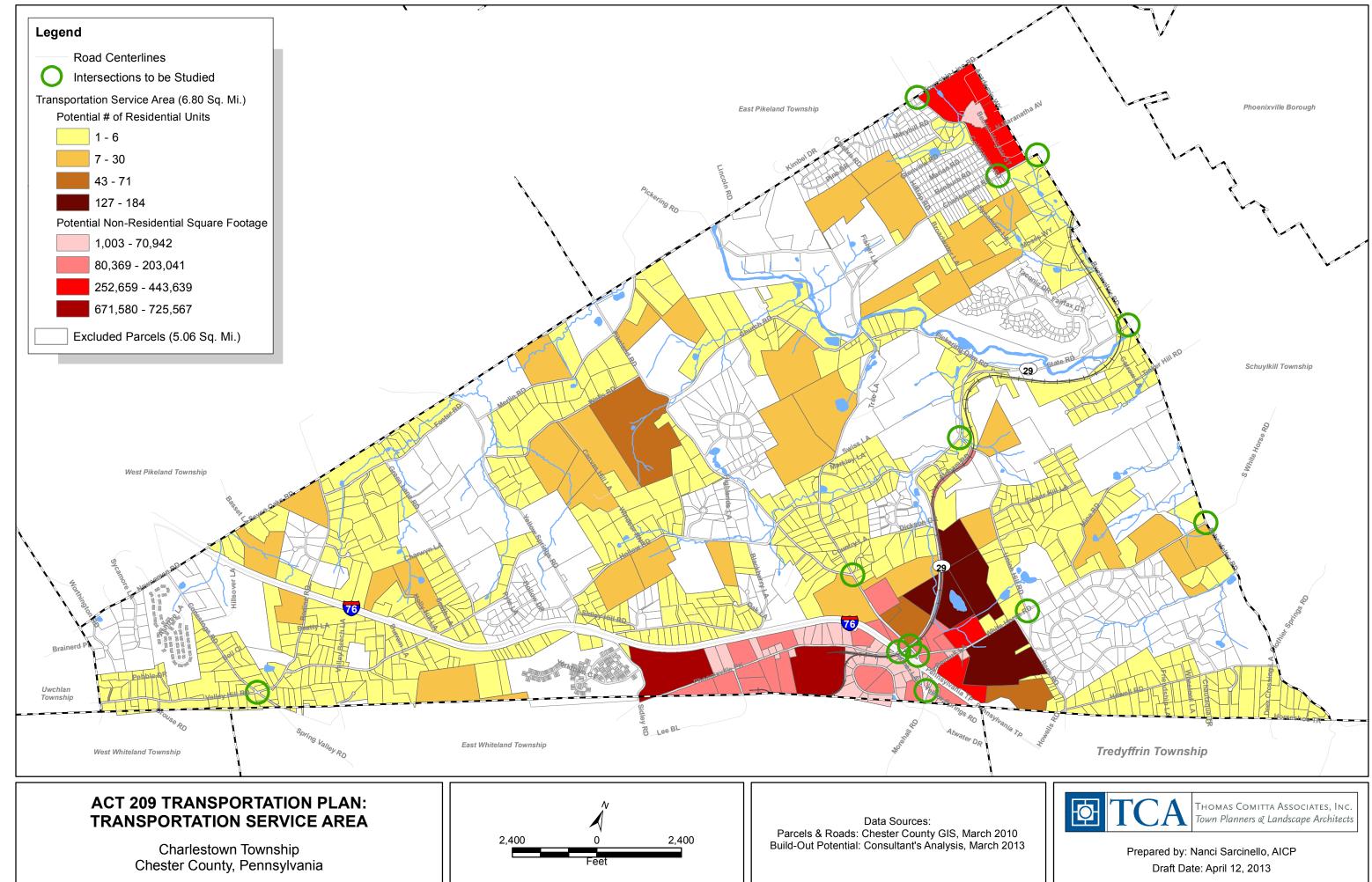
- 1. Act 209 Transportation Service Area showing Parcels with Build-Out Potential;
- 2. Act 209 Transportation Service Area showing Parcels with Build-Out Potential, and Zoning District Boundaries;
- 3. Build-Out Analysis showing Potential # of Residential Units; and
- 4. Build-Out Analysis showing Potential # of Residential Units, and Zoning District Boundaries.

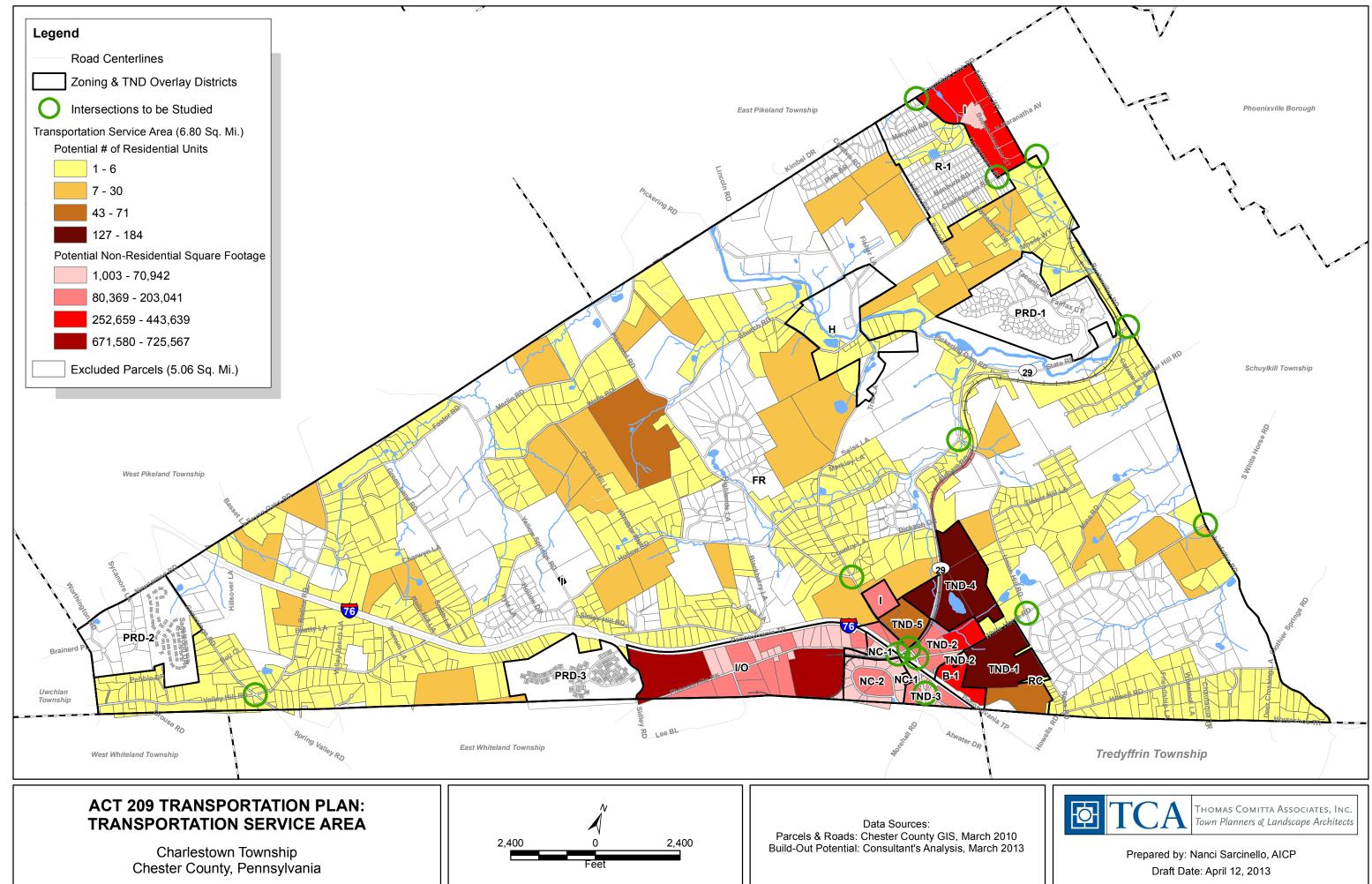
The calculations reported in the previous section are based on GIS – Geographic Information System mapping analysis.

Please refer to the four maps that follow.









#### Appendix A – Resolution 2013-806

On March 4, 2013 the Charlestown Township Board of Supervisors passed Resolution 2013-806, and formed the Transportation Advisory Committee, also known as the Impact Fee Advisory Committee.

In addition an Impact Fee not exceeding \$1,000 per anticipated peak hour trip is enabled through this Resolution, for a period not to exceed 18 months after March 4, 2013.

Resolution 2013-806 follows.

#### CHARLESTOWN TOWNSHIP CHESTER COUNTY, PENNSYLVANIA

#### **RESOLUTION 2013-806**

WHEREAS, Charlestown Township (the "Township") desires to provide appropriate levels of transportation services to its citizens so as to adequately protect their health, safety and welfare; and

**WHEREAS**, the Township will experience both residential and commercial growth in Devault and surrounding areas now that the Pennsylvania Turnpike Slip Ramp opened in 2012; and

WHEREAS, the Township estimates it will not be able to undertake appropriate transportation capital improvements unless more funds are generated for that purpose; and

WHEREAS, Act 209 of 1990 (the "Act") empowers municipalities to provide for transportation capital improvements through the imposition of impact fees upon new development following enactment of an appropriate impact fee ordinance adopted pursuant to the provisions of the Act; and

**WHEREAS**, the Township desires to establish an impact fee advisory committee for the purpose of developing a transportation impact fee ordinance under the terms of Section 504-A(v)(1) of the Act, also known as the Transportation Advisory Committee.

**NOW, THEREFORE, BE IT RESOLVED** that the Charlestown Township Board of Supervisors hereby resolves as follows:

1. The Charlestown Township Impact Fee Advisory Committee (the "Committee") is hereby created.

2. All of the members of the Committee are residents of, or conduct business within, the Township.

3. Not less than 40% of the Committee are representatives of the real estate, commercial and residential development and building industries.

4. The Committee shall serve in an advisory capacity and shall develop land use assumptions, conduct roadway sufficiency analysis studies, and make recommendations pertaining to development of road improvements, capital improvements and impact fees for the Township, all as provided by the Act.

5. Under Act 209 of 1990, an impact fee not exceeding \$1,000 per anticipated peak hour trip may be imposed for a period not to exceed 18 months after adoption of this Resolution, on building permits for new construction of new development that are approved as preliminary or tentative applications for land development, subdivision or PRD; provided, however, that the impact fee shall not be retroactive or applicable to plats submitted for preliminary or tentative approval prior to the adoption of this Resolution. 6. The Township staff is hereby authorized to prepare and publicly advertise the Notice of Intention to Adopt a Transportation Impact Fee Ordinance. This Notice shall be published twice in a newspaper of general circulation in the Township, with the first publication to occur as soon as possible after the passage of this Resolution, and the second to occur not less than one nor more than three weeks thereafter.

7. The geographical area this resolution and committee applies to the entirety of Charlestown Township.

Resolved this 4th day of March, 2013.

ATTEST:

SIGNED:

FRANK PILIERO, CHAIRMAN BOARD OF SUPERVISORS

LINDAM. CSETE, TOWNSHIP SECRETARY

# Appendix B – Article V-A

Municipal Capital Improvement Pennsylvania Municipalities Planning Code

Pages 33 through 44 of the PA MPC follow. These pages relate to P.L.1343, No. 209 of December 19, 1990. Act 209 enables municipalities to collect revenues to fund new capital infrastructure from the public sector for offsite road improvements within a Transportation Service Area.

court costs, including reasonable attorney fees incurred by the municipality as a result thereof. No judgment shall commence or be imposed, levied or payable until the date of the determination of a violation by the district justice. If the defendant neither pays nor timely appeals the judgment, the municipality may enforce the judgment pursuant to the applicable rules of civil procedure. Each day that a violation continues shall constitute a separate violation, unless the district justice determining that there has been a violation further determines that there was a good faith basis for the person, partnership or corporation violating the ordinance to have believed that there was no such violation, in which event there shall be deemed to have been only one such violation until the fifth day following the date of the determination of a violation by the district justice and thereafter each day that a violation continues shall constitute a separate violation.

(b) The court of common pleas, upon petition, may grant an order of stay, upon cause shown, tolling the per diem judgment pending a final adjudication of the violation and judgment.

(c) Nothing contained in this section shall be construed or interpreted to grant to any person or entity other than the municipality the right to commence any action for enforcement pursuant to this section.

# **Article V-A - Municipal Capital Improvement**

\* Compiler's Note: (a)(9) of Act 1996-58, which created the Department of Community and Economic Development and abolished the Department of Community Affairs, provided that housing, community assistance and other functions under Article V-A are transferred from the Department of Community Affairs to the Department of Community and Economic Development.

(Art. added Dec. 19, 1990, P.L.1343, No.209)

**Section 501-A. Purposes.** To further the purposes of this act in an era of increasing development and of a corresponding demand for municipal capital improvements, to insure that the cost of needed capital improvements be applied to new developments in a manner that will allocate equitably the cost of those improvements among property owners and to respond to the increasing difficulty which municipalities are experiencing in developing revenue sources to fund new capital infrastructure from the public sector, the following powers are granted to all municipalities, other than counties, which municipalities have adopted either a municipal or county comprehensive plan, subdivision and land development ordinance and zoning ordinance.

**Section 502-A. Definitions.** The following words and phrases when used in this article shall have the meanings given to them in this section unless the context clearly indicates otherwise:

"Adjusted for family size," adjusted in a manner which results in an income eligibility level which is lower for households with fewer than four people, or higher for households with more than four people, than the base income eligibility level determined as provided in the definition of low- to moderate-income persons based upon a formula as established by the rule of the agency.

"Adjusted gross income," all wages, assets, regular cash or noncash contributions or gifts from persons outside the household, and such other resources and benefits as may be determined to be income by rule of the department, adjusted for family size, less deductions under section 62 of the Internal Revenue Code of 1986 (Public Law 99-514, 26 U.S.C. 62 et seq.). "Affordable," with respect to the housing unit to be occupied by low- to moderate-income persons, monthly rents or monthly mortgage payments, including property taxes and insurance, that do not exceed 30% of that amount which represents 100% of the adjusted gross annual income for households within the metropolitan statistical area (MSA) or, if not within the MSA, within the county in which the housing unit is located, divided by 12.

"Agency," the Pennsylvania Housing Finance Agency as created pursuant to the act of December 3, 1959 (P.L.1688, No.621), known as the "Housing Finance Agency Law."

\* "Department," the Department of Community and Economic Development of the Commonwealth.

"Existing deficiencies," existing highways, roads or streets operating at a level of service below the preferred level of service designated by the municipality, as adopted in the transportation capital improvement plan.

"Highways, roads or streets," any highways, roads or streets identified on the legally adopted municipal street or highway plan or the official map which carry vehicular traffic, together with all necessary appurtenances, including bridges, rights-of-way and traffic control improvements. The term shall not include the interstate highway system.

"Impact fee," a charge or fee imposed by a municipality against new development in order to generate revenue for funding the costs of transportation capital improvements necessitated by and attributable to new development.

"Low- to moderate-income persons," one or more natural persons or a family, the total annual adjusted gross household income of which is less than 100% of the median annual adjusted gross income for households in this Commonwealth or is less than 100% of the median annual adjusted gross income for households within the metropolitan statistical area (MSA) or, if not within the MSA, within the county in which the household is located, whichever is greater.

"New development," any commercial, industrial or residential or other project which involves new construction, enlargement, reconstruction, redevelopment, relocation or structural alteration and which is expected to generate additional vehicular traffic within the transportation service area of the municipality.

"Offsite improvements," those public capital improvements which are not onsite improvements and that serve the needs of more than one development.

"Onsite improvements," all improvements constructed on the applicant's property, or the improvements constructed on the property abutting the applicant's property necessary for the ingress or egress to the applicant's property, and required to be constructed by the applicant pursuant to any municipal ordinance, including, but not limited to, the municipal building code, subdivision and land development ordinance, PRD regulations and zoning ordinance.

"Pass-through trip," a trip which has both an origin and a destination outside the service area.

"Road improvement," the construction, enlargement, expansion or improvement of public highways, roads or streets. It shall not include bicycle lanes, bus lanes, busways, pedestrian ways, rail lines or tollways.

"Traffic or transportation engineer or planner," any person who is a registered professional engineer in this Commonwealth or is otherwise qualified by education and experience to perform traffic or transportation planning analyses of the type required in this act and who deals with the planning, geometric design and traffic operations of highways, roads and streets, their networks, terminals and abutting lands and relationships with other modes of transportation for the achievement of convenient, efficient and safe movement of goods and persons. "Transportation capital improvements," those offsite road improvements that have a life expectancy of three or more years, not including costs for maintenance, operation or repair.

"Transportation service area," a geographically defined portion of the municipality not to exceed seven square miles of area which, pursuant to the comprehensive plan and applicable district zoning regulations, has an aggregation of sites with development potential creating the need for transportation improvements within such area to be funded by impact fees. No area may be included in more than one transportation service area.

# Section 503-A. Grant of Power.

(a) The governing body of each municipality other than a county, in accordance with the conditions and procedures set forth in this act, may enact, amend and repeal impact fee ordinances and, thereafter, may establish, at the time of municipal approval of any new development or subdivision, the amount of an impact fee for any of the offsite public transportation capital improvements authorized by this act as a condition precedent to final plat approval under the municipality's subdivision and land development ordinance. Every ordinance adopted pursuant to this act shall include, but not be limited to, provisions for the following:

- (1) The conditions and standards for the determination and imposition of impact fees consistent with the provisions of this act.
- (2) The agency, body or office within the municipality which shall administer the collection, disbursement and accounting of impact fees.
- (3) The time, method and procedure for the payment of impact fees.
- (4) The procedure for issuance of any credit against or reimbursement of impact fees which an applicant may be entitled to receive consistent with the provisions of this act.
- (5) Exemptions or credits which the municipality may choose to adopt. In this regard the municipality shall have the power to:
  - (i) Provide a credit of up to 100% of the applicable impact fees for all new development and growth which constitutes affordable housing to low- and moderate-income persons.
  - (ii) Provide a credit of up to 100% of the applicable impact fees for growth which are determined by the municipality to serve an overriding public interest.
  - (iii) Exempt de minimus applications from impact fee requirements. If such a policy is adopted, the definition of de minimus shall be contained in the ordinance.

(b) No municipality shall have the power to require as a condition for approval of a land development or subdivision application the construction, dedication or payment of any offsite improvements or capital expenditures of any nature whatsoever or impose any contribution in lieu thereof, exaction fee, or any connection, tapping or similar fee except as may be specifically authorized under this act.

(c) No municipality may levy an impact fee prior to the enactment of a municipal impact fee ordinance adopted in accordance with the procedures set forth in this act, except as may be specifically authorized by the provisions of this act. A transportation impact fee shall be imposed by a municipality within a service area or areas only where such fees have been determined and imposed pursuant to the standards, provisions and procedures set forth herein.

(d) Impact fees may be used for those costs incurred for improvements designated in the transportation capital improvement program which are attributable to new development, including the acquisition of land and rights-of-way; engineering, legal and planning costs; and all other costs which are directly related to road improvements within the service area or areas, including debt service. Impact fees shall not be imposed or used for costs associated with any of the following:

- (1) Construction, acquisition or expansion of municipal facilities other than capital improvements identified in the transportation capital improvements plan required by this act.
- (2) Repair, operation or maintenance of existing or new capital improvements.
- (3) Upgrading, updating, expanding or replacing existing capital improvements to serve existing developments in order to meet stricter safety, efficiency, environmental or regulatory standards not attributable to new development.
- (4) Upgrading, updating, expanding or replacing existing capital improvements to remedy deficiencies in service to existing development or fund deficiencies in existing municipal capital improvements resulting from a lack of adequate municipal funding over the years for maintenance or capital construction costs.
- (5) Preparing and developing the land use assumptions, roadway sufficiency analysis and transportation capital improvement plan, except that impact fees may be used for no more than a proportionate amount of the cost of professional consultants incurred in preparing a roadway sufficiency analysis of infrastructure within a specified transportation service area, such allowable proportion to be calculated by dividing the total costs of all road improvements in the adopted transportation capital improvement program within the transportation service area attributable to projected future development within the service area, as defined in section 504-A(e)(1)(iii), by the total costs of all road improvements in the adopted transportation service area, as defined in section 504-A(e)(1)(iii), by the total costs of all road improvements in the adopted transportation service area, as defined in section 504-A(e)(1)(iii), by the total costs of all road improvements in the adopted transportation service area, as defined in section 504-A(e)(1)(iii), by the total costs of all road improvements in the adopted transportation service area, as defined in section 504-A(e)(1)(iii), by the total costs of all road improvements in the adopted transportation capital improvement program within the specific transportation service area, as defined in section 504-A(e)(1)(iii).

(e) Nothing in this act shall be deemed to alter or affect a municipality's existing power to require an applicant for municipal approval of any new development or subdivision from paying for the installation of onsite improvements as provided for in a municipality's subdivision and land development ordinance as authorized by this act.

(f) No municipality may delay or deny any application for building permit, certificate-of-occupancy, development or any other approval or permit required for construction, land development, subdivision or occupancy for the reason that any project of an approved capital improvement program has not been completed.

(g) A municipality which has enacted an impact fee ordinance on or before June 1, 1990, may for a period not to exceed one year from the effective date of this article, adopt an impact fee ordinance to conform with the standards and procedures set forth in this article. Where a fee previously imposed pursuant to an ordinance in effect on June 1, 1990, for transportation improvements authorized by this article is greater than the recalculated fee due under the newly adopted ordinance, the individual who paid the fee is entitled to a refund of the difference. If the recalculated fee is greater than the previously paid fee, there shall be no additional charge.

(h) The powers provided by this section may be exercised by two or more municipalities, other than counties, which have adopted a joint municipal comprehensive plan pursuant to Article XI through a joint authority, subject to the conditions and procedures set forth in this article.

# Section 504-A. Transportation Capital Improvements Plan.

(a) A transportation capital improvements plan shall be prepared and adopted by the governing body of the municipality prior to the enactment of any impact fee ordinance. The municipality shall provide qualified professionals to assist the transportation impact fee advisory committee or the planning commission in the preparation of the transportation capital improvements plan and calculation of the impact fees to be imposed to implement the plan in accordance with the procedures, provisions and standards set forth in this act.

(b)(1) An impact fee advisory committee shall be created by resolution of a municipality intending to adopt a transportation impact fee ordinance. The resolution shall describe the geographical area or areas of the municipality for which the advisory committee shall develop the land use assumptions and conduct the roadway sufficiency analysis studies.

- (2) The advisory committee shall consist of no fewer than 7 nor more than 15 members, all of whom shall serve without compensation. The governing body of the municipality shall appoint as members of the advisory committee persons who are either residents of the municipality or conduct business within the municipality and are not employees or officials of the municipality. Not less than 40% of the members of the advisory committee shall be representatives of the real estate, commercial and residential development, and building industries. The municipality may also appoint traffic or transportation engineers or planners to serve on the advisory committee provided the appointment is made after consultation with the advisory committee members. The traffic or transportation engineers or planners appointed to the advisory committee may not be employed by the municipality for the development of or consultation on the roadways sufficiency analysis which may lead to the adoption of the transportation capital improvements plan.
- (3) (The governing body of the municipality may elect to designate the municipal planning commission appointed pursuant to Article II as the impact fee advisory committee. If the existing planning commission does not include members representative of the real estate, commercial and residential development, and building industries at no less than 40% of the membership, the governing body of the municipality shall appoint the sufficient number of representatives of the aforementioned industries who reside in the municipality or conduct business within the municipality to serve as ad hoc voting members of the planning commission whenever such commission functions as the impact fee advisory committee.
- (4) No impact fee ordinance may be invalidated as a result of any legal action challenging the composition of the advisory committee which is not brought within 90 days following the first public meeting of said advisory committee.
- (5) The advisory committee shall serve in an advisory capacity and shall have the following duties:
  - (i) To make recommendations with respect to land use assumptions, the development of comprehensive road improvements and impact fees.
  - (ii) To make recommendations to approve, disapprove or modify a capital improvement program by preparing a written report containing these recommendations to the municipality.
  - (iii) To monitor and evaluate the implementation of a capital improvement program and the assessment of impact fees, and report annually to the municipality with respect to the same.
  - (iv) To advise the municipality of the need to revise or update the land use assumptions, capital improvement program or impact fees.

(c)(1) As a prerequisite to the development of the transportation capital improvements plan, the advisory committee shall develop land use assumptions for the determination of future growth and development within the designated area or areas as described by the municipal resolution and recommend its findings to the governing body. Prior to the issuance and presentation of a written report to the municipality on the recommendations for proposed land use assumptions upon which to base the development of the transportation capital improvements plan, the advisory committee shall conduct a public hearing, following the providing of proper notice in accordance with section 107, for the consideration of the land use assumption proposals. Following receipt of the advisory committee report, which shall include the findings of the public hearing, the governing body of the municipality shall by resolution approve, disapprove or modify the land use assumptions recommended by the advisory committee.

- (2) The land use assumptions report shall:
  - (i) Describe the existing land uses within the designated area or areas and the highways, roads or streets incorporated therein.
  - (ii) To the extent possible, reflect projected changes in land uses, densities of residential development, intensities of nonresidential development and population growth rates which may affect the level of traffic within the designated area or areas over a period of at least the next five years. These projections shall be based on an analysis of population growth rates during the prior five-year period, current zoning regulations, approved subdivision and land developments, and the future land use plan contained in the adopted municipal comprehensive plan. It may also refer to all professionally produced studies and reports pertaining to the municipality regarding such items as demographics, parks and recreation, economic development and any other study deemed appropriate by the municipality.
- (3) If the municipality is located in a county which has created a county planning agency, the advisory committee shall forward a copy of their proposed land use assumptions to the county planning agency for its comments at least 30 days prior to the public hearing. At the same time, the advisory committee shall also forward copies of the proposed assumptions to all contiguous municipalities and to the local school district for their review and comments.

(d) (1) Upon adoption of the land use assumptions by the municipality, the advisory committee shall prepare, or cause to be prepared, a roadway sufficiency analysis which shall establish the existing level of infrastructure sufficiency and preferred levels of service within any designated area or areas of the municipality as described by the resolution adopted pursuant to the creation of the advisory committee. The roadway sufficiency analysis shall be prepared for any highway, road or street within the designated area or areas on which the need for road improvements attributable to projected future new development is anticipated. The municipality shall commission a traffic or transportation engineer or planner to assist the advisory committee in the preparation of the roadway sufficiency analysis. Municipalities may jointly commission such engineer or planner to assist in the preparation of multiple municipality roadway sufficiency analyses. In preparing the roadway sufficiency analysis report, the engineer may consider and refer to previously produced professional studies and reports relevant to the production of the roadway sufficiency analysis as required by the section. It shall be deemed that the roads, streets and highways not on the roadway sufficiency analysis report are not impacted by future development. The roadway sufficiency analysis shall include the following components:

- (i) The establishment of existing volumes of traffic and existing levels of service.
- (ii) The identification of a preferred level of service established pursuant to the following:
  - (A) The level of service shall be one of the categories of road service as defined by the Transportation Research Board of the National Academy of Sciences or the Institute of Transportation Engineers. The municipality may choose to select a level of service on a transportation service area basis as the preferred level of service. The preferred levels of service shall be designated by the governing body of the municipality following determination of the existing level of service as established by the roadway sufficiency analysis. If the preferred level of service is designated as greater than the existing level of service, the municipality shall be required to identify road improvements needed to correct the existing deficiencies.
  - (B) Following adoption of the preferred level of service, such level of service may be waived for a particular road segment or intersection if the municipality finds that one or more of the following effectively precludes provision of road improvements necessary to meet the level of service: geometric design limitations, topographic limitations or the unavailability of necessary right-of-way.

- (iii) The identification of existing deficiencies which need to be remedied to accommodate existing traffic at the preferred level of service.
- (iv) The specification of the required road improvements needed to bring the existing level of service to the preferred level of service.
- (v) A projection of anticipated traffic volumes, with a separate determination of pass-through trips, for a period of not less than five years from the date of the preparation of the roadway sufficiency analysis based upon the land use assumptions adopted under this section.
- (vi) The identification of forecasted deficiencies which will be created by "pass-through" trips.
- (2) The advisory committee shall provide the governing body with the findings of the roadway sufficiency analysis. Following receipt of the advisory committee report, the governing body shall by resolution approve, disapprove or modify the roadway sufficiency analysis recommended by the advisory committee.

(e) (1) Utilizing the information provided by the land use assumption and the roadway sufficiency analysis as the basis for determination of the need for road improvements to remedy existing deficiencies and accommodate future projected traffic volumes, the advisory committee shall identify those capital projects which the municipality should consider for adoption in its transportation capital improvements plan and shall recommend the delineation of the transportation service area or areas. The capital improvement plan shall be developed in accordance with generally accepted engineering and planning practices. The capital improvement program shall include projections of all designated road improvements in the capital improvement program. The total cost of the road improvements shall be based upon estimated costs, using standard traffic engineering standards, with a 10% maximum contingency which may be added to said estimate. These costs shall include improvements to correct existing deficiencies with identified anticipated sources of funding and timetables for implementation. The transportation capital improvements plan shall include the following components:

- A description of the existing highways, roads and streets within the transportation service area and the road improvements required to update, improve, expand or replace such highways, roads and streets in order to meet the preferred level of service and usage and stricter safety, efficiency, environmental or regulatory standards not attributable to new development.
- (ii) A plan specifying the road improvements within the transportation service area attributable to forecasted pass-through traffic so as to maintain the preferred level of service after existing deficiencies identified by the roadway sufficiency analysis have been remedied.
- (iii) A plan specifying the road improvements or portions thereof within the transportation service area attributable to the projected future development, consistent with the adopted land use assumptions, in order to maintain the preferred level of service after accommodation for pass-through traffic and after existing deficiencies identified in the roadway sufficiency analysis have been remedied.
- (iv) The projected costs of the road improvements to be included in the transportation capital improvements plan, calculating separately for each project by the following categories:
  - (A) The costs or portion thereof associated with correcting existing deficiencies as specified in subparagraph (i).
  - (B) The costs or portions thereof attributable to providing road improvements to accommodate forecasted pass-through trips as specified in subparagraph (ii).
  - (C) The costs of providing necessary road improvements or portions thereof attributable to projected future development as specified in subparagraph (iii); provided that no more than 50% of the cost of the improvements to any highway, road or street which qualifies as a State Highway or portion of the rural State Highway System as provided in section 102

of the act of June 1, 1945 (P.L.1242, No. 428), known as the "State Highway Law" may be included.

- (v) A projected timetable and proposed budget for constructing each road improvement contained in the plan.
- (vi) The proposed source of funding for each capital improvement included in the road plan. This shall include anticipated revenue from the Federal Government, State government, municipality, impact fees and any other source. The estimated revenue for each capital improvement in the plan which is to be provided by impact fees shall be identified separately for each project.
- (2) The source of funding required for projects to remedy existing deficiencies as set forth in paragraph (1)(i) and the road improvements attributable to forecasted pass-through traffic as set forth in paragraph (1)(ii) shall be exclusive of funds generated from the assessment of impact fees.
- (3) Upon the completion of the transportation capital improvements plan and prior to its adoption by the governing body of the municipality and the enactment of a municipal impact fee ordinance, the advisory committee shall hold at least one public hearing for consideration of the plan. Notification of the public hearing shall comply with the requirement of section 107. The plan shall be available for public inspection at least ten working days prior to the date of the public hearing. After presentation of the recommendation by the advisory committee or its representatives at a public meeting of the governing body, the governing body may make such changes to the plan prior to its adoption as the governing body deems appropriate following review of the public comments made at the public hearing.
- (4) The governing body may periodically, but no more frequently than annually, request the impact fee advisory committee to review the capital improvements plan and impact fee charges and make recommendations for revisions for subsequent consideration and adoption by the governing body based only on the following:
  - (i) New subsequent development which has occurred in the municipality.
  - (ii) Capital improvements contained in the capital improvements plan, the construction of which has been completed.
  - (iii) Unavoidable delays beyond the responsibility or control of the municipality in the construction of capital improvements contained in the plan.
  - (iv) Significant changes in the land use assumptions.
  - (v) Changes in the estimated costs of the proposed transportation capital improvements, which may be recalculated by applying the construction cost index as published in the American City/County Magazine or the Engineering News Record.
  - (vi) Significant changes in the projected revenue from all sources listed needed for the construction of the transportation capital improvements.

(f) Any improvements to Federal-aid or State highways to be funded in part by impact fees shall require the approval of the Department of Transportation and, if necessary, the United States Department of Transportation. Nothing in this act shall be deemed to alter or diminish the powers, duties or jurisdiction of the Department of Transportation with respect to State highways or the rural State highway system.

(g) Two or more municipalities may, upon agreement, appoint a joint impact fee advisory committee which may develop roadway sufficiency analyses and transportation capital improvements plans for the participating municipalities. The members of the advisory committee must be either residents of or conduct business within one of the participating municipalities.

#### Section 505-A. Establishment and Administration of Impact Fees.

(a) (1) The impact fee for transportation capital improvements shall be based upon the total costs of the road improvements included in the adopted capital improvement plan within a given transportation service area attributable to and necessitated by new development within the service area as calculated pursuant to section 504-A(e)(1)(iv)(C), divided by the number of anticipated peak hour trips generated by all new development consistent with the adopted land use assumptions and calculated in accordance with the Trip Generation Manual published by the Institute of Transportation Engineers, fourth or subsequent edition as adopted by the municipality by ordinance or resolution to equal a per trip cost for transportation improvements within the service area.

- (2) The specific impact fee for a specific new development or subdivision within the service area for road improvements shall be determined as of the date of preliminary land development or subdivision approval by multiplying the per trip cost established for the service area as determined in section 503-A(a) by the estimated number of peak-hour trips to be generated by the new development or subdivision using generally accepted traffic engineering standards.
- (3) A municipality may authorize or require the preparation of a special transportation study in order to determine traffic generation or circulation for a new nonresidential development to assist in the determination of the amount of the transportation fee for such development or subdivision. The municipality shall set forth by ordinance the circumstances in which such a study should be authorized or required, provided however, that no special transportation study shall be required when there is no deviation from the land use assumptions resulting in increased density, intensity or trip generation by a particular development. A developer or municipality may, however, at any time, voluntarily prepare and submit a traffic study for a proposed development or may have such a study prepared at its expense after the development is completed to include actual trips generated by the development for use in any appeal as provided for under this act. The special transportation study shall be prepared by a qualified traffic or transportation engineer using procedures and methods established by the municipality based on generally accepted transportation planning and engineering standards. The study, where required by the municipality, shall be submitted prior to the imposition of an impact fee and shall be taken into consideration by the municipality in increasing or reducing the amount of the impact fee for the new development for the amount shown on the impact fee schedule adopted by the municipality.

(b) The governing body shall enact an impact ordinance setting forth a description of the boundaries and a fee schedule for each transportation service area. At least ten working days prior to the adoption of the ordinance at a public meeting, the ordinance shall be available for public inspection. The impact fee ordinance shall include, but not be limited to, those provisions set forth in section 503-A(a) and conform with the standards, provisions and procedures set forth in this act.

(c) (1) A municipality may give notice of its intention to adopt an impact fee ordinance by publishing a statement of such intention twice in one newspaper of general circulation in the municipality. The first publication shall not occur before the adoption of the resolution by which the municipality establishes its impact fee advisory committee. The second publication shall occur not less than one nor more than three weeks thereafter.

(2) A municipal impact fee ordinance adopted under and pursuant to this act may provide that the provisions of the ordinance may have retroactive application, for a period not to exceed 18 months after the adoption of the resolution creating an impact fee advisory committee pursuant to section 504-A (b)(1), to preliminary or tentative applications for land development, subdivision or PRD. with the municipality on or after the first publication of the municipality's intention to adopt an impact fee ordinance; provided, however, that the impact fee imposed on building permits for construction of new development approved pursuant to such applications filed during the period of pendancy shall not exceed

1,000 per anticipated peak hour trip as calculated in accordance with the generally accepted traffic engineering standards as set forth under the provisions of subsection (a)(1) or the subsequently adopted fee established by the ordinance, whichever is less.

(3) No action upon an application for land development, subdivision or PRD. shall be postponed, delayed or extended by the municipality because adoption of a municipal impact fee ordinance is being considered. Furthermore, the adoption of an impact fee ordinance more than 18 months after adoption of a resolution creating the impact fee advisory committee shall not be retroactive or applicable to plats submitted for preliminary or tentative approval prior to the legal publication of the proposed impact fee ordinance and any fees collected pursuant to this subsection shall be refunded to the payor of such fees; provided the adoption of the impact fee ordinance.

(d) Any impact fees collected by a municipality pursuant to a municipal ordinance shall be deposited by the municipality into an interest-bearing fund account designated solely for impact fees, clearly identifying the transportation service area from which the fee was received. Funds collected in one transportation service area must be accounted for and expended within that transportation service area, and such funds shall only be expended for that portion of the transportation capital improvements identified as being funded by impact fees under the transportation capital improvements plan. Notwithstanding any other provisions of this act, municipalities may expend impact fees paid by an applicant on projects not contained in the adopted transportation capital improvement plan, or may provide credit against impact fees for the value of any construction projects not contained in the transportation capital improvement plan which are performed at the applicant's expense, if all of the following criteria are met:

- (1) The applicant has provided written consent to use of its collected impact fees, or the provision of such credit against the applicant's impact fees, for specific transportation projects which are not included in the transportation capital improvement plan.
- (2) The alternative transportation projects, whether highway or multimodal, have as their purpose the reduction of traffic congestion or the removal of vehicle trips from the roadway network.
- (3) The municipality amends its transportation capital improvement plan components required by section 504-A(e)(1)(vi) to provide replacement of the collected impact fees transferred to transportation projects outside the approved transportation capital improvement plan from sources other than impact fees or developer contributions within three years of completion of the alternative projects to which the transferred fees were applied or for which credit was provided. All interest earned on such funds shall become funds of that account. The municipality shall provide that an accounting be made annually for any fund account containing impact fee proceeds and earned interest. Such accounting shall include, but not be limited to, the total funds collected, the source of the funds collected, the total amount of interest accruing on such funds and the amount of funds expended on specific transportation improvements. Notice of the availability of the results of the accounting shall be included and published as part of the annual audit required of municipalities. A copy of the report shall also be provided to the advisory committee.

(e) All transportation impact fees imposed under the terms of this act shall be payable at the time of the issuance of building permits for the applicable new development or subdivision. The municipality may not require the applicant to provide a guarantee of financial security for the payment of any transportation impact fees, except the municipality may provide for the deposit with the municipality of financial security in an amount sufficient to cover the cost of the construction of any road improvement contained in the transportation capital improvement plan which is performed by the applicant.

(f) An applicant shall be entitled to a credit against the impact fee in the amount of the fair market value of any land dedicated by the applicant to the municipality for future right-of-way, realignment or widening of any existing roadways or for the value of any construction of road improvements contained in the transportation capital improvement program which is performed at the applicant's expense. The amount of such credit for any capital improvement constructed shall be the amount allocated in the capital improvement program, including contingency factors, for such work. The fair market value of any and dedicated by the applicant shall be determined as of the date of the submission of the land development or subdivision application to the municipality.

(g) Impact fees previously collected by a municipality shall be refunded, together with earned accrued interest thereon, to the payor of such fees from the date of payment under any of the following circumstances:

- (1) In the event that a municipality terminates or completes an adopted capital improvements plan for a transportation service area and there remains at the time of termination or completion undispersed funds in the accounts established for that purpose, the municipality shall provide written notice by certified mail to those persons who previously paid the fees which remain undispersed of the availability of said funds for refund of the person's proportionate share of the fund balance. The allocation of the refund shall be determined by generally accepted accounting practices. In the event that any of the funds remain unclaimed following one year after the notice, which notice shall be provided to the last known address provided by the payor of the fees to the municipality, the municipality shall be authorized to transfer any funds so remaining to any other fund in the municipality without any further obligation to refund said funds.
- (2) If the municipality fails to commence construction of any transportation service area road improvements within three years of the scheduled construction date set forth in the transportation capital improvements plan, any person who paid any impact fees pursuant to that transportation capital improvements plan shall, upon written request to the municipality, receive a refund of that portion of the fee attributable to the contribution for the uncommenced road improvement, plus the interest accumulated thereon from the date of payment.
- (3) If, upon completion of any road improvements project, the actual expenditures of the capital project are less than 95% of the costs properly allocable to the fee paid within the transportation service area in which the completed road improvement was adopted, the municipality shall refund the pro rata difference between the budgeted costs and the actual expenditures, including interest accumulated thereon from the date of payment, to the person or persons who paid the impact fees for such improvements.
- (4) If the new development for which transportation impact fees were paid is not commenced prior to the expiration of building permits issued for the new development within the time limits established by applicable building codes within the municipality or if the building permit as issued for the new development is altered and the alteration results in a decrease in the amount of the impact fee due in accordance with the calculations set forth in subsection (a)(1).

(h) Where an impact fee ordinance has been adopted pursuant to the other provisions of this act, the ordinance may impose an additional impact fee upon new developments which generate 1,000 or more new peak-hour trips, net of pass-by trips as defined by the current edition of the institute of transportation engineers trip generation manual, during the peak-hour period designated in the ordinance. In such case, the impact fee ordinance adopted under this act may require the applicant for such a development to perform a traffic analysis of development traffic impact on highways, roads or streets outside the transportation service area in which the development site is located but within the boundaries of the municipality or municipalities adopting a joint municipal impact fee ordinance or municipalities which are participating in a joint municipal authority authorized to impose impact fees by this article. Any such highways, roads or streets or parts thereof outside the

transportation service area which will accommodate 10% or more of development traffic and 100 or more new peak-hour trips may be required to be studied, and the ordinance may require the applicant to mitigate the traffic impacts of the development on such highways, roads and streets to maintain the predevelopment conditions after completion of the development.

## Section 506-A. Appeals.

(a) Any person required to pay an impact fee shall have the right to contest the land use assumptions, the development and implementation of the transportation capital improvement program, the imposition of impact fees, the periodic updating of the transportation capital improvement program, the refund of impact fees and all other matters relating to impact fees, including the constitutionality or validity of the impact fee ordinance by filing an appeal with the court of common pleas.

(b) A master may be appointed by the court to hear testimony on the issues and return the record and a transcript of the testimony, together with a report and recommendations, or the court may appoint a master to hold a nonrecord hearing and to make recommendations and return the same to the court, in which case either party may demand a hearing de novo before the court.

(c) Any cost incurred by parties in such an appeal shall be the separate responsibility of the parties.

## Section 507-A. Prerequisites for Assessing Sewer and Water Tap-in Fees.

(a) No municipality may charge any tap-in connection or other similar fee as a condition of connection to a municipally owned sewer or water system unless such fee is calculated as provided in the applicable provisions of the act of May 2, 1945, (P.L.382, No.164), known as the "Municipality Authorities Act of 1945."

(b) Where a municipally owned water or sewer system is to be extended at the expense of the owner or owners of properties or where the municipality otherwise would construct the connection end or customer facilities services (other than water meter installation), the property owner or owners shall have the right to construct such extension or make such connection and install such customer facilities himself or themselves or through a subcontractor in accordance with the "Municipality Authorities Act of 1945."

(c) Where a property owner or owners construct or cause to be constructed any addition, expansion or extension to or of a sewer or water system of a municipality whereby such addition, expansion or extension provides future excess capacity to accommodate future development upon the lands of others, the municipality shall provide for the reimbursement to the property owner or owners in accordance with the provisions of the "Municipality Authorities Act of 1945."

#### Section 508-A. Joint Municipal Impact Fee Ordinance.

(a) For the purpose of permitting municipalities which cooperatively plan for their future to also provide for transportation capital improvements in a cooperative manner, the governing bodies of each municipality which has adopted a joint municipal comprehensive plan pursuant to Article XI, in accordance with the conditions and procedures set forth in this article, may cooperate with one or more municipalities to enact, amend and repeal joint transportation impact fee ordinances to accomplish the purposes of this act in accordance with this article.

(b) The procedures set forth in this article shall be applicable to the enactment of a joint municipal impact fee ordinance.

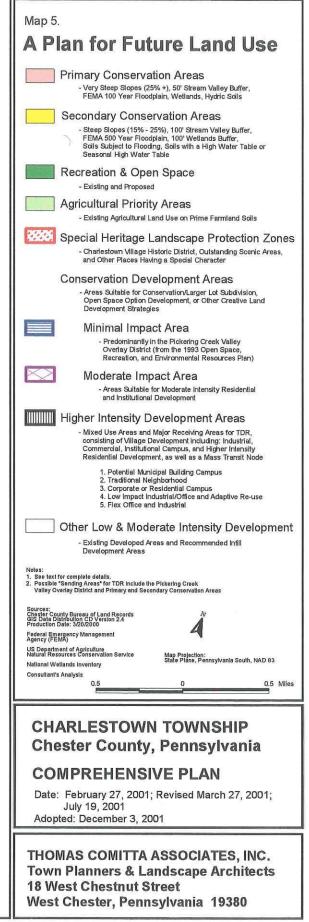
(c) Each municipality party to a joint municipal impact fee ordinance shall approve the advisory committee and shall adopt the land use assumptions, roadway sufficiency analysis, capital improvement plan, and ordinances and amendments thereto in accordance with the procedures in this article, and no such ordinance shall become effective until it has been properly adopted by all the participating municipalities.

# Appendix C – Comprehensive Plan Excerpts

The following excerpts of the Charlestown Township Comprehensive Plan 2001 are included:

- + Map 5. A Plan for Future Land Use; and
- + Chapter 3. Demographic Profile.





# **Demographic Profile**

Comprehensive Plan Update: A Plan for Conservation & Growth Management Charlestown Township - Chester County, PA

# DEMOGRAPHIC PROFILE

# Överview

This chapter presents selected demographic characteristics of Charlestown Township based on decennial U.S. Census data from 1970 to 2000. It also contains forecasts for population and housing growth through 2020. Data for neighboring municipalities and Chester County as a whole are also included. This regional view provides perspective on the Township's position in the area in terms of surrounding demographic patterns and trends, and consequent impacts and development pressures. Implications for future land use in Charlestown Township are also discussed.

The Demographic Profile focuses on four main topics: population, housing, socioeconomic characteristics and economic (employment) characteristics. At the time of adoption of this Plan, only a portion of the 2000 Census data was available. This chapter will need to be updated after all 2000 Census data are available.

#### Population Profile

The Population Profile includes a discussion population counts, projections, densities, and selected population characteristics. When applicable, data for the adjoining municipalities and the County are included in order to draw comparisons to regional trends. Data from 1950 are used in some cases to provide a long-range perspective on population trends. The section concludes with a discussion of planning implications drawn from the population data.

#### Population Count

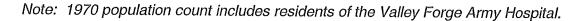
U.S. Census population counts for Charlestown Township can be misleading because of the presence, until 1974, of the Valley Forge Army Hospital, which housed a considerable temporary population. While the 1950 Census excluded this population, the 1960 and 1970 Census counts included this population. The inclusion of the Valley Forge Army Hospital artificially inflates the Township's population giving the impression that there was an influx of population during 1970, and a major population decline in 1980 (Table 1).

In order to provide a more accurate portrayal of the Township's permanent population, the data must be adjusted to exclude the Hospital population (Figure 2). The adjusted data utilizes "household population" recorded by the 1970 Census. This figure was recorded at 1,996 persons. The adjusted data also include the 1950 count in order to more fully depict historic population trends.

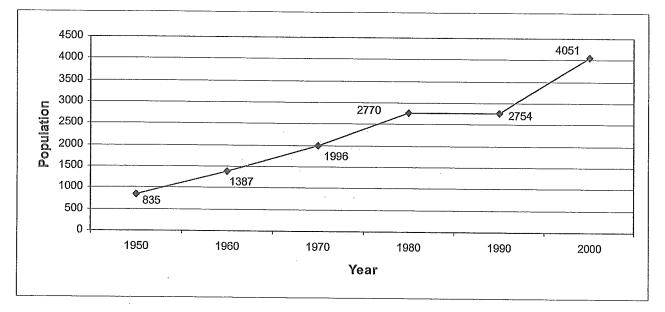
# Table 1. Population Count: 1970 - 2000

Municipality	1970	1980	% Change	1990	% Change	2000	% Change
	Census	Census	(1970-1980)	Census	(1980-1990)		(1990-2000)
Chester County	278,311	316,660	14%	376,396	19%	433,501	15%
Charlestown Township	3,528	2,770	-21%	2,754	-1%	4.051	47%
East Pikeland Township	4,384	4,410	1%	5,825	32%	6.551	12%
East Whiteland Township	7,242	8,468	17%	8,398	-1%	9,333	11%
Schuylkill Township	5,779	5,993	4%	5,538	-8%	6,960	26%
Tredyffrin Township	23,337	23,019	-1%	29,028	26%	29,062	0%
Uwchlan Township	5,473	8,364	53%	12,999	55%	16,576	28%
West Pikeland Township	1,420	1,536	8%	2,323	51%	3,551	53%
West Whiteland Township	7,149	9,581	34%	12,403	29%	16,499	33%

Sources: U.S. Census Bureau, Census 2000 Chester County Profile, 1998







#### Sources: U.S. Census Bureau, Census 2000 Charlestown Township Comprehensive Plan, 1965 & 1976 Chester County Profile, 1998

# Note: 1960 and 1970 population counts do not include residents of the Valley Forge Army Hospital.

In examining the adjusted population data, a more realistic picture of Charlestown's population trend emerges. Although the data in Table 1 indicate that the Township lost nearly 25% of its population between 1970 and 1980, this decline was primarily due to the closing of the Valley Forge Army Hospital in 1974. Based on this adjusted count, the Township's population actually increased by 774 persons (39%) between 1970 and 1980.

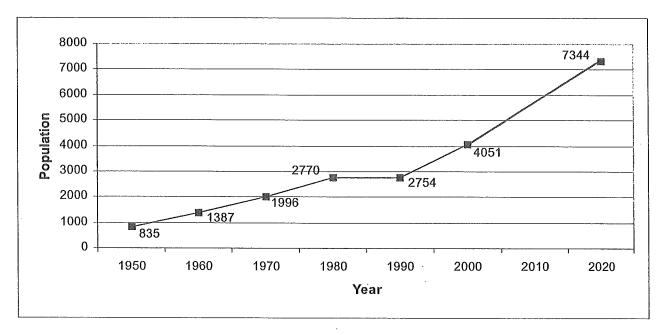
Although Charlestown Township experienced a true decline in population from 1980 to 1990, it was minimal. At less than 1%, it was more of a plateau than a decline.

The 2000 Census reflects a somewhat sharper population increase than has been seen in the past. Between 1990 and 2000, Charlestown's population climbed from 2,754 to 4,051 persons, a 47% increase. This is well above the County's population increase for this time period, and, of all adjoining municipalities, is second only to West Pikeland Township. However, it is important to note that this dramatic increase can be largely attributed to the construction of a single, large development - the Charlestown Hunt PRD. This figure also includes the student population of the Valley Forge Christian College.

#### **Population Projections**

Population projections indicate a population of 7,344 in 2020 (an increase of 3,293 persons over the 2000 figure). The projections are calculated using an estimate of future housing (and housing occupancy) based on proposed and potential residential development. They also include the anticipated student population at the Valley Forge Christian College. The projections do not, however, take into account the many factors that may affect population growth such as a dwindling supply of land, changing economic conditions, and birth and death rates. Furthermore, population projections at the Township level are extremely fragile. A new, unanticipated development could greatly reduce the accuracy of the numbers. While steps have been taken to increase the accuracy of these projections, they remain a *general* indication of future population sizes.

#### Figure 3. Population Projections: 2020



Sources: U.S. Census Bureau, Census 2000 Charlestown Township Comprehensive Plan, 1965 & 1976 Chester County Profile, 1998 Consultant's Analysis

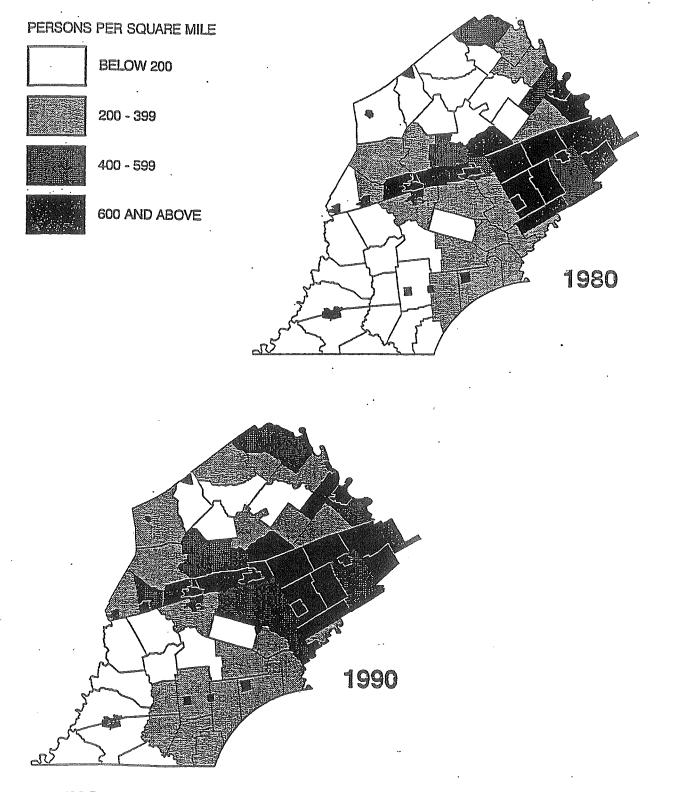
#### **Population Density**

Map 2 depicts the distribution of population density in Chester County by municipality. By providing maps of 1980 and 1990, it is possible to see the change in population density over time. This provides a greater perspective of the population dynamics surrounding Charlestown. Of the Townships that border Charlestown, both East Pikeland and West Pikeland Townships show increases in population density from 1980 to 1990, while Schuylkill Township shows a decrease (in terms of a move from one value class to another). On a broader scale, several municipalities in the County's mid-section exhibit population density increases, as do many in the northern and eastern portions of the County.

Notes: 1. 1960 and 1970 population counts do not include the Valley Forge Army Hospital. 2. 2020 population projection includes students of the Valley Forge Christian College.

Map 2

# Population Density, 1980 & 1990



Source: U.S. Bureau of the Census.

#### Selected Population Characteristics

This section provides further detail of Charlestown's population in terms of age and gender characteristics. The data, taken from the 2000 Census, are shown in Table 2. Figure 4, "Age Composition of Charlestown Township - 2000," is a graphic illustration of the information contained in Table 2.

<u>Age</u>: The two largest age groups in Charlestown Township are 0 to 19 years (30%) and 45 to 64 years (25%). This may indicate that Charlestown is growing as a community largely comprised of families, with parents in the 45 years + age group and children in the 0 - 19 years age group. The next two largest age categories are 35 to 44 years (18%), and 19 to 34 years (17%). Persons age 65 and over account for 10% of the Township's population. Median age is 36.8 years.

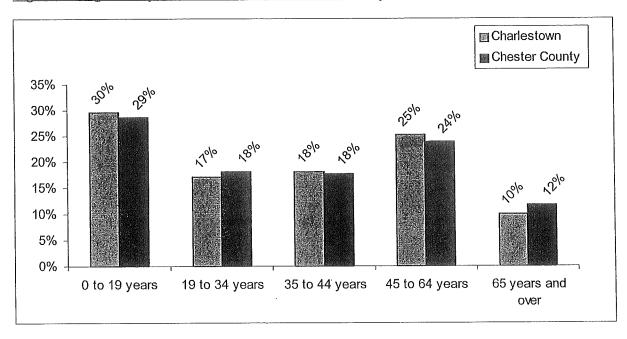
The age distribution of Charlestown Township's population is very similar to that of the County.

<u>Gender</u>: According to "Population by Gender," Charlestown Township has nearly even numbers of males and females. Of the total 2000 population, 1,974 persons (49%) are male and 2,077 persons (51%) are female.

<b>Population Characteristics</b>	Charlestown	% of Total	<b>Chester County</b>	% of Total	
	2000	Population	2000	Population	
Population by Age					
0 to 19 years	1,199	30%	124,591	29%	
19 to 34 years	697	17%	78,130	18%	
35 to 44 years	733	18%	76,903	18%	
45 to 64 years	1,020	25%	103,200	24%	
65 years and over	402	10%	50,677	12%	
Population by Gender					
Total Male	1,974	49%	212,739	49%	
Total Female	2,077	51%	220,762	51%	

#### Table 2. Selected Population Characteristics of Charlestown Township: 2000

Source: U.S. Census Bureau, Census 2000





Source: U.S. Census Bureau, Census 2000

#### **Planning Implications of Population**

In viewing Map 2, it is apparent that Charlestown is becoming enveloped by communities with high population densities. This is testimony to the fact that Charlestown Township is under immense development pressure. Charlestown is also impacted by the growth in these surrounding townships, especially in terms of increased traffic on its roadways. The issue is whether a rural and open Charlestown can continue to exist despite these external pressures. A program of conservation and growth management is viewed as the most effective way to approach this issue.

Based on the adjusted population count and population projections, it is clear that the general population trend in Charlestown Township is one of steady growth. While the population increase during the 1990's can be viewed as an anomaly caused by the construction of a single PRD, it is also an indication of the dramatic impact that a development of this type can have on the Township. With the potential for new PRDs in the future, the Township should be prepared for another similar population increase. Furthermore, increasing population over the next two decades may necessitate additional facilities and services such as recreation and open space, and roadway improvements (designed to accommodate additional vehicles).

The Township's age composition is important in planning for the appropriate types of housing and community facilities. The number of children under 19 and the number of persons in the 45 to 64 years age group suggests that Charlestown is largely a family community. Families with children could warrant the need for more recreational facilities and family and youth oriented activities. At the same time, the data suggests that over the next 20 years, the Township's population may age significantly as those age 45 to 64 move into the 65 years and over age group. Assuming that these persons remain in Charlestown, the Township should be prepared to offer activities and services to retirees and the elderly. Housing should consist of a variety of types and densities that afford the elderly and young adults the opportunity to remain in the Township. The current pattern and style of housing (large, single family homes) may not be accessible to these populations.

#### **Housing Profile**

The housing unit profile includes data related to housing unit counts, housing unit projections, selected housing characteristics, housing value, and housing affordability. When applicable, data for the adjoining municipalities and the County are included in order to enable comparisons to regional trends. The section concludes with a discussion of planning implications drawn from the housing data. Where census 200 data are not yet available, 1990 figures are used.

#### Housing Unit Count

The housing unit count tracks changes in the number of housing units from 1970 to 2000 (Table 3).

From 1970 to 1980, housing in Charlestown Township increased by 195 units, from 611 to 806 units. In terms of percent change, Charlestown ranked fourth among those townships listed in Table 3. The highest growth rate was recorded Uwchlan Township (84%), followed by West Whiteland Township (68%) and East Whiteland Township (63%). The overall growth rate for the County was generally consistent with that of Charlestown Township, at 37%.

In the 1980's, the pace of housing growth in Charlestown slowed considerably. Seventy units were added during this decade, bringing the total number of units in 1990 to 876. The Township's 9% increase was the second lowest in the immediate area. Once again, Uwchlan Township recorded the highest growth rate at 73%. The County as a whole experienced a 27% increase in the number of housing units.

From 1990 to 2000, Charlestown Township gained 521 units – a 59% increase. As with the population count, this sharp increase in numbers can be largely attributed to the construction of a single PRD, Charlestown Hunt, which contains 363 units. In addition to this is the partially completed Charlestown Oaks development, which contained approximately 145 units by 2000.

Municipality	1970	1980	1990	% Change	2000	% Change
wuncipancy			1980-1990	Census	1990-2000	
	an a					
Chester County	80,457	110,183	139,597	27%	163,773	17%
Charlestown Township	611	806	876	9%	1,397	59%
East Pikeland Township	1,222	1,465	2,014	37%	2,604	29%
East Whiteland Township	1,679	2,732	3,001	10%	3,460	15%
Schuylkill Township	1,621	2,024	2,115	4%	2,652	25%
Tredyffrin Township	7,031	8,845	11,924	35%	12,551	5%
Uwchlan Township	1,491	2,744	4,743	73%	6,030	27%
West Pikeland Township	433	545	837	54%	1,240	48%
West Whiteland Township		3,158	4,900	55%	6,748	38%

# Table 3. Housing Unit Count: 1970 - 2000

Sources: U.S. Census Bureau, Census 2000 Chester County Profile, 1998

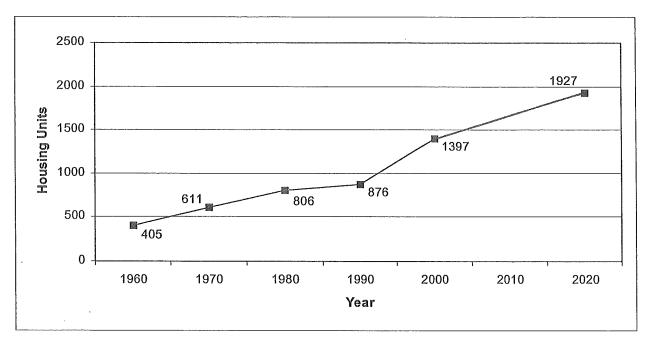
Note: The count of housing units does not include the Valley Forge Christian College.

#### **Housing Unit Projections**

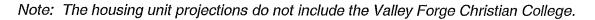
Housing unit projections indicate a count of 1,927 units for 2020 – an increase of 530 units over the 2000 figure. The projections are calculated using an estimate of future housing units based on proposed and potential residential development. They do not take into account factors that may affect housing growth such as the dwindling supply of land and changing economic and social conditions. Furthermore, housing unit projections at the Township level are extremely fragile. A new, unanticipated development could greatly reduce the accuracy of the numbers. While steps have been taken to increase the accuracy of these projections, they remain a *general* indication of future housing unit counts.

Note that while the population projections include the Valley Forge Christian College student population, the housing unit projections do not include the College living quarters (which are considered by the Census as Group Quarters). Therefore, direct comparisons between the projected number of housing units and the projected population must take this condition into consideration.





#### Sources: U.S. Census Bureau, Census 2000 Charlestown Township Comprehensive Plan, 1965 & 1976 Chester County Profile, 1998 Consultant's Analysis



#### **Selected Housing Characteristics**

The discussion of selected housing characteristics includes information on housing occupancy and households from the 2000 Census, and information on the ages and types of structures from the 1990 Census. Table 4 provides detailed data related to these items.

<u>Housing Occupancy (2000)</u>: Housing Occupancy is broken down by occupied units, owneroccupied units, renter-occupied units, and vacant units. Of the 1,397 total housing units in Charlestown Township, 1,340 (96%) are occupied units. Of these occupied units, 1,236 (92%) are owner occupied and 104 (8%) are renter occupied. The remaining 57 units (4%) are classified as vacant.

In terms of housing occupancy, Charlestown Township is generally consistent with the County figures.

<u>Household Characteristics (2000)</u>: A "household," as defined by the 2000 Census, "consists of all the people who occupy a housing unit." The term "household" does not apply to group quarters, which includes nursing homes, prisons, college dormitories, and military quarters.

Of the total number of housing units in Charlestown Township, 1340 (96%) are considered Households (equal to the number of occupied units). Of this total, 1,005 (75%) are Family Households, 335 (25%) are Non-family Households, and 273 (20%) are classified as Householder Living Alone. The number of persons per household is 2.73.

The household characteristics of Charlestown Township are generally consistent with those of the County.

<u>Age of Structure (1990)</u>: The age of structures is classified according to ranges beginning with "1939 or earlier," followed by 10-year increments from 1940 to 1990. The largest number of houses appears in the periods from 1950 to 1959 and 1960 to 1969. After this time, the numbers decrease, indicating that construction of new homes declined in the 1970's and 1980's. Approximately 17% of the houses date from 1939 or earlier.

Whereas in Charlestown the 1970-1979 and 1980-1990 figures represent a decrease in new housing construction, the county-wide figures are greatest during these two time periods. Divergent trends are also shown for the 1950-1959 and 1960-1969 time periods. In this regard, Charlestown does not reflect the county-wide trend.

<u>Type of Structure (1990)</u>: The various types of housing structures are defined as 1 unit detached, 1 unit attached, 2-9 units, 10+ units, and mobilehome, trailer, and other. The vast majority of housing in the Township is comprised of one unit detached structures, with 835 units (95%). The second largest category is 2-9 unit structures, with 19 units (2%). One unit attached structures account for 11 units (1%). There are currently no 10+ unit structures in the Township.

## Table 4. Selected Housing Characteristics of Charlestown Township: 1990 & 2000

Housing Characteristics (2000)	Charlestown	% of Total	<b>Chester County</b>	% of Total
Total Housing Units	1,397	100%	163,773	100%
Total Occupied Units	1,340	96%	157,905	96%
Owner Occupied Units	1,236	92%	120,428	76%
Renter Occupied Units	104	8%	37,477	24%
Vacant	57	4%	5,868	4%
Total Households	1,340	100%	157,905	100%
Family Households	1,004	75%	113,303	72%
Non-Family Households	336	25%	44,602	28%
Living Alone	273	20%	35,753	23%
Avg. Household Size (2000)	2.73		2.65	
Age of Structure (1990)	·			
1939 or earlier	147	17%	28,196	20%
1940 - 1949	16	2%	6,490	5%
1950 - 1959	210	24%	17,745	13%
1960 - 1969	201	23%	22,344	16%
1970 - 1979	147	17%	29,791	21%
1980 - 1990	155	18%	35,031	25%
Type of Structure (1990)				
1 unit detached	835	95%	84,795	61%
1 unit attached	11	1%	21,773	16%
2 - 9 units	19	2%	12,964	9%
10 + units	0	0%	13,247	9%
Mobilehome, Trailer, Other	11	1%	6,818	5%

Note: 2000 Census data for Age of Structure and Type of Structure are not yet available.

Sources: U.S. Census Bureau, Census 2000

Census '90: General Characteristics of Population and Housing for Chester County Census '90: General Economic, Social, and Housing Unit Characteristics for Chester County

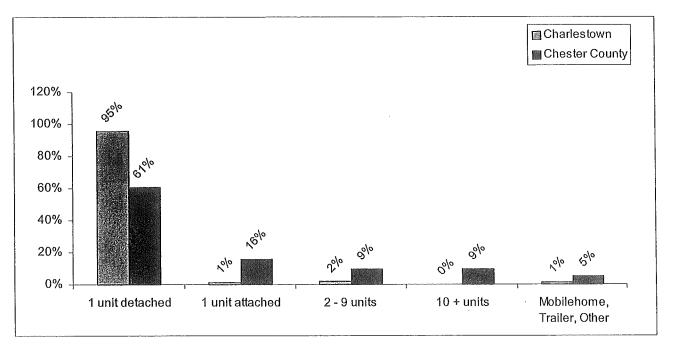


Figure 6. Types of Housing Structures of Charlestown Township: 1990

Sources: Census '90: General Characteristics of Population and Housing for Chester County Census '90: General Economic, Social, and Housing Unit Characteristics for Chester County

#### **Housing Value**

This section provides 1990 Census data pertaining to the value of owner-occupied housing units, median household value, and median contract rent. Countywide data are also included in order to assess Charlestown's position relative to the County.

According to Table 5, the median value of owner-occupied housing is \$239,200 for Charlestown Township. These figures are significantly higher than those recorded for Chester County. Median rent, however, is only slightly higher than the County figure.

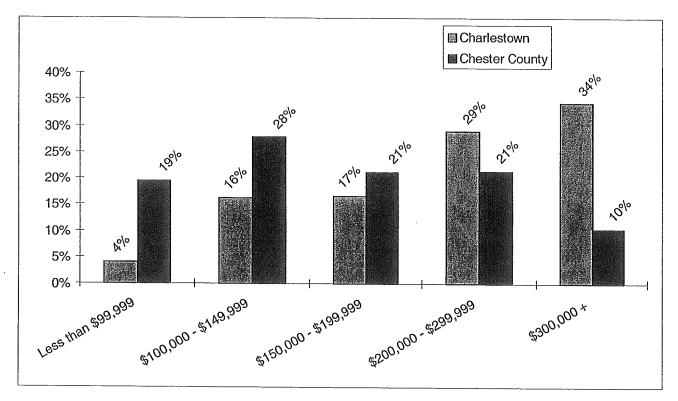
Of the Township's 844 total owner-occupied housing units in 1990, 608 are included in the survey of housing unit values. As shown in Table 5 and Figure 7, housing unit values are somewhat skewed toward the higher end of the value range. Nearly two-thirds of the units fall within the two highest value brackets – 34% in the \$300,000+ bracket, and 29% in the \$200,000 to \$299,999 bracket. Approximately 27% are valued between \$100,000 and \$199,999. Chester County as a whole exhibits a more even distribution of housing values, with the largest number of units valued in the \$100,000 – \$149,999 range.

#### Table 5. Housing Values: 1990

Housing Value	Charlestown	% of	Chester County	% of	
	1990	Total	1990	Total	
Less than \$99,999	24	4%	16,100	19%	
\$100,000 - \$149,999	99	16%	22,994	28%	
\$150,000 - \$199,999	101	17%	17,461	21%	
\$200,000 - \$299,999	176	29%	17,708	21%	
\$300,000 +	208	34%	8,540	10%	
Median Value Owner Occupied Housing	\$239,200		\$155,900	<u></u>	
Median Contract Rent	\$508		\$496		

Sources: Census '90: General Characteristics of Population and Housing for Chester County Census '90: General Economic, Social, and Housing Unit Characteristics for Chester County

## Figure 7. Housing Values: 1990



Sources: Census '90: General Characteristics of Population and Housing for Chester County Census '90: General Economic, Social, and Housing Unit Characteristics for Chester County

## Housing Affordability<sup>1</sup>

Affordable housing is commonly defined as housing with total costs less than or equal to 28% of an owner's gross income. If the portion of income dedicated to housing is sufficient to cover the costs associated with a given housing unit, then the house is considered affordable. If the costs are greater than the income dedicated to housing, then the house is considered unaffordable.

The Affordability Index shows the relationship of income to housing costs. It is calculated by comparing the Countywide median monthly household income with the Township's median total monthly housing costs (see below). This indicates whether the Township's housing is affordable to the general County population. An Affordability Index of 100 or higher is considered affordable; an Affordability Index below 100 is considered unaffordable.

Affordability Index developed by the National Association of Realtors:

Affordability Index = <u>28% of Monthly Median Household Income</u> Monthly Home Ownership Cost

Based on 1996 estimates of median household income for Chester County of \$57,965 (monthly median household income of \$4,830) and a total monthly home ownership cost for Charlestown Township of \$1,385, Charlestown's Affordability Index is 97.7. Of the neighboring municipalities, only three – East Pikeland, East Whiteland, and West Whiteland - have Affordability Indexes over 100.

## Planning Implications of Housing Data

The build-out analysis (conducted during the creation of the Future Land Use Plan) suggests that the Township can accommodate 777 additional units at current zoning. This scenario would lead to a sprawling pattern of residential development across the Charlestown landscape. If the predominant housing type of single-family, detached units continues, sprawl will result and the supply of land will be greatly diminished.

As an alternative, this Plan advocates a mix of development intensities and dwelling types intended to prevent sprawl. Providing for such a mix will enable the Township to better manage the supply and demand of its land resources. Growth may then take place in a more controlled manner. A mix of dwelling types may also lead to a more even distribution of housing values, thereby supporting socioeconomic diversity.

<sup>&</sup>lt;sup>1</sup> Source: Chester County Planning Commission, Planning Data Sheet #53, "Housing Affordability," July 1998.

## Socioeconomic Characteristics

Socioeconomic Characteristics include data related to income and educational attainment. Table 6 provides 1990 Census figures related to these items for both Charlestown Township and Chester County. Educational attainment is also illustrated with a bar chart in Figure 8.

#### <u>Income</u>

Two income measures are presented in Table 6. Per capita income is recorded at \$31,737. Median household income is \$63,909. Both are substantially higher than the County income figures.

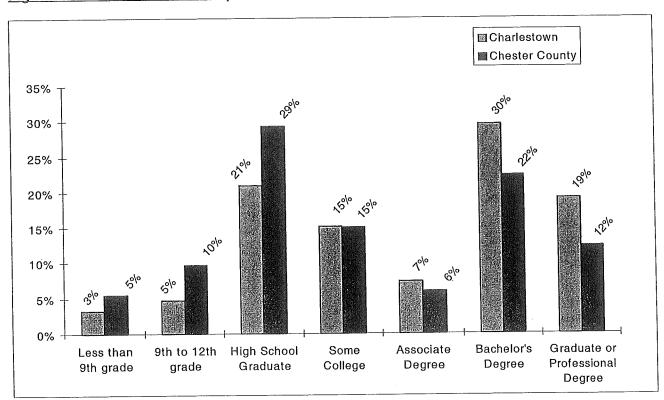
#### Educational Attainment

The educational attainment of Charlestown Township residents peaks at three different levels -High School Graduate, Bachelor's Degree, and Graduate or Professional Degree. Charlestown Township exceeds the County in all levels of education above High School Graduate.

Socioeconomic Indicator	Charlestown	% of	Chester County	% of
	1990	Total	1990	Total
Per Capita Income	\$31,737	· · · · · · · · · · · · · · · · · · ·	\$20,601	
Median Household Income	\$63,909		\$45,642	
Education Level				
Less than 9th grade	60	3%	13,321	5%
9th to 12th grade	87	5%	23,770	10%
High School Graduate	390	21%	71,921	29%
Some College	280	15%	36,769	15%
Associate Degree	136	7%	14,505	6%
Bachelor's Degree	548	30%	54,879	22%
Graduate or Professional Degree	354	19%	30,242	12%

#### Table 6. Socioeconomic Indicators of Charlestown Township: 1990

Sources: Census '90: General Characteristics of Population and Housing for Chester County Census '90: General Economic, Social, and Housing Unit Characteristics for Chester County



## Figure 8. Years of School Completed of Charlestown Township Residents: 1990

## Sources: Census '90: General Characteristics of Population and Housing for Chester County Census '90: General Economic, Social, and Housing Unit Characteristics for Chester County

## Selected Economic Characteristics

This section pertains to the employment and labor force characteristics of Charlestown Township and Chester County as a whole. It includes a description of employment by industry; employment by occupation; place of work at the state and county level; and place of work at the Metropolitan Statistical Area (MSA)/Primary Metropolitan Statistical Area (PMSA). The location of major regional employers is also discussed. This section provides insight into the relationship between employment and land use in Charlestown Township.

According to Table 7, the largest percentage of Charlestown's labor force is employed in Professional & Related Services (a total of 32% in Health, Educational, and Other Professional & Related Services). The second largest percentage is employed in Manufacturing (a total of 20% in Durable and Non-durable Goods), followed by Retail Trade (17%). This pattern nearly mirrors the countywide employment pattern, although Charlestown exhibits a slightly higher percentage in the Profession Services category (32% in Charlestown; 24% in Chester County).

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## Table 7. Employment by Industry: 1990

Industry	Charlestown	% of	Chester County	% of
	1990	Total	1990	Total
Agriculture, Forestry, Fisheries	54	4%	7,173	4%
Mining	0	0%	388	0%
Construction	59	4%	12,497	6%
Manufacturing, Non-durable Goods	124	9%	17,131	9%
Manufacturing, Durable Goods	153	11%	21,962	11%
Transportation	60	4%	6,713	3%
Communications, Other Public Utilities	7	0%	5,273	3%
Wholesale Trade	42	3%	11,110	6%
Retail Trade	246	17%	28,822	15%
Finance, Insurance, Real Estate	128	9%	16,933	9%
Business & Repair Rervices	52	4%	11,351	6%
Personal Services	26	2%	4,230	2%
Entertainment, Recreation Services	17	1%	2,066	1%
Professional & Related Services:				0%
Health Services	79	5%	16,638	8%
Educational Services	295	20%	16,666	8%
Other Professional & Related Services	106	7%	16,078	8%
Public Administration	0	0%	3,550	2%
Total Employment	1448	100%	198,581	100%

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Source: U.S. Census Bureau, 1990

Table 8 shows that nearly one-half of Charlestown's labor force works in Managerial and Professional Specialty occupations. Another 28% work in Technical, Sales, and Administrative Support positions. Although the general employment pattern is consistent with the County, the much higher percentage of the Township's labor force employed in Managerial and Professional Specialty occupations may explain the higher per capita and median household income figures shown in Table 6.

Occupation	Charlestown	% of	Chester County	% of	
	1990	Total	1990	Total	
Managerial, Professional Specialty	705	49%	68,806	35%	
Technical, Sales, Administrative Support	408	28%	65,223	33%	
Service	136	9%	19,338	10%	
Farming, Forestry, Fishing	32	2%	5,323	3%	
Precision Production, Craft, Repair	68	5%	18,651	9%	
Operators, Fabricators, Laborers	99	7%	21,240	11%	
Total	1,448	100%	198,581	100%	

#### Table 8. Employment by Occupation: 1990

Source: U.S. Census 1990

When analyzed together, Place of Work at the State and County Level, and Place of Work at the MSA/PMSA Level reveal exactly where Charlestown's residents are employed. Fifty-six percent work in the County, 39% work outside the County, and 5% work outside of the State (Table 9). Table 10 provides further detail, demonstrating that 12% (171 persons) work in the Central City (i.e. Philadelphia), and 84% work in other parts of the Philadelphia MSA. The number of persons working within the County can be explained in part by the high concentration of business and industrial parks and major retail centers in East and West Whiteland, Tredyffrin and Uwchlan Townships.

#### Table 9. Place of Work: County & State Level: 1990

Place of Work	Charlestown	% of	Chester County	% of	
	1990 Total		1990	Total	
Worked in state of residence:					
Worked in County of residence	787	56%	118,433	61%	
Worked outside county of residence	550	39%	61,663	32%	
Worked outside State of residence	77	5%	15,411	8%	
Total	1414	100%	195,507	100%	

Source: U.S. Census 1990

## Table 10. Place of Work: MSA/PMSA Level: 1990

Place of Work	Charlestown	% of	Chester County	% of
	1990	Total	1990	Total
			_	
Living in an MSA/PMSA:				
Worked in MSA/PMSA of residence:				
Central city	171	12%	12,998	7%
Remainder of this MSA/PMSA	1,190	84%	163,871	84%
Worked outside MSA/PMSA of residence:				
Worked in a different MSA/PMSA:				
Central city	35	2%	5,067	3%
Remainder of different MSA/PMSA	18	1%	12,982	7%
Total	1,414	100%	194,918	100%

Source: U.S. Census 1990

DVRPC employment projections, measured as number of jobs, show very little growth in Charlestown Township over the next 20 years. According to Table 11, there will be an increase of 100 jobs (7%) from 2000 to 2010, and no growth (0%) from 2010 to 2020. However, analysis conducted by the Charlestown Township's Planning Consultant shows a potential for 6,500 new jobs based on current zoning.

Table 11 also shows a continuing increase in job growth in the municipalities surrounding Charlestown. The only exceptions are Schuylkill Township and East Pikeland Township. However, recommended revisions to the employment projections based on input from the County and local municipalities suggest that all adjoining municipalities will experience an increase in employment.

Table 11.	Employment	Projections:	<u> 2000 – 2020</u>
			the second s

Municipality	1990	1997	2000	2010	%	2020	%
	Census	Estimate	Forecast	Forecast	Change	Forecast	Change
Chester County	197,752	224,178	230,350	256,600	11%	277,500	8%
Charlestown Township	1,151	1,343	1,350	1,450	7%	1,450	0%
East Pikeland Township	950	986	950	1,000	5%	950	-5%
East Whiteland Township	18,601	19,693	19,800	22,800	15%	26,150	15%
Schuylkill Township	2,818	2,894	3,050	2,900	-5%	2,800	-3%
Tredyffrin Township	25,206	28,625	29,200	32,105	10%	34,000	6%
Uwchlan Township	5,241	6,683	7,250	9,100	26%	10,500	15%
West Pikeland Township	809	969	1,000	1,150	15%	1,300	13%
West Whiteland Township	14,960	20,787	22,200	25,500	15%	29,950	17%

Source: Delaware Valley Regional Planning Commission, Year 2025 County & Municipal Population & Employment Forecasts

## Planning Implications of Labor Force and Employment Characteristics

The 1998 *Chester County Profile* identifies 71 business and industrial parks and 32 major retail centers in the County. Approximately one-half of the business and industrial parks, and one-half of the major retail centers are located in the municipalities immediately surrounding Charlestown. Furthermore, the two top employers in the County, The Vanguard Group and Seimens (formerly Shared Medical Systems) are in close proximity to Charlestown. Organizations such as these may attract and draw upon an educated and skilled labor force such as that which exists in Charlestown.

The fact that eastern Chester County is such a prominent area in terms of employment growth and opportunity may explain the increasing land use pressures in Charlestown. Should job growth continue, as indicated by the employment projections, this pressure will only increase. Charlestown must therefore be proactive in issues of land use and traffic management.

## LAND USE ASSUMPTIONS REPORT Act 209 Transportation Plan

## Appendix D – Resolution for Adoption of the Land Use Assumptions Report

The Adoption of this Plan took place on December 2, 2013, after a complete Act 247 review process.

The Resolution for adoption of the Land Use Assumptions Report appears on the following page.

#### CHARLESTOWN TOWNSHIP CHESTER COUNTY, PENNSYLVANIA

## RESOLUTION 2013- 817

WHEREAS, Charlestown Township is authorized by Article V-A of the Pennsylvania Municipalities Planning Code (Act 247 of 1968, As Amended); and

WHEREAS, the Charlestown Township Transportation Advisory Committee, in conjunction with the Consultant, Thomas Comitta Associates, Inc., have prepared the Land Use Assumptions Report dated November 14, 2013, in accordance with the Pennsylvania Municipalities Planning Code (Act 247 of 1968, As Amended); and

WHEREAS, the Chester County Planning Commission, the Charlestown Township Planning Commission, the Great Valley School District, the adjoining municipalities, and the Phoenixville Regional Planning Committee have reviewed the Plan and have made recommendations; and

WHEREAS, it is the intention of the Charlestown Township Board of Supervisors that this Resolution serves to adopt the Land Use Assumptions Report, in accordance with Article V-A of the Pennsylvania Municipalities Planning Code; and

**WHEREAS**, it is the intention of the Charlestown Township Board of Supervisors that this Resolution adopting the Land Use Assumptions Report accomplishes the foregoing purposes.

**NOW, THEREFORE, BE IT RESOLVED** that the Charlestown Township Board of Supervisors formally adopts the attached Land Use Assumptions Report, dated November 14, 2013.

Resolved this 2<sup>nd</sup> day of December, 2013.

SIGNED:

FRANK PILIERO, CHAIRMAN BOARD OF SUPERVISORS

ATTEST:

LINDA M. CSETE, TOWNSHIP SECRETARY