To get Census Blocks (2000) Data:

<u>To get Shapefile:</u>

1. http://www.esri.com/data/download/census2000_tigerline/index.html

2. Select State – Submit Selection

3. Select by Layer – Census Blocks 2000 – Submit Selection

4. Select All Counties/County – Proceed to Download

5. Download File

6. Unzip File

7. Unzip each County file

8. Add all Counties Shapefiles to the New Project in ArcMap

9. ArcToolbox – Data Management Tool – General – Append

10. Add all Counties except one to Input Features

11. Select one omitted class to Target Dataset - OK

12. ArcToolbox – Data Management Tool – General – Rename

13. Select Target Class from the previous operation as Input Data Element

14. Select Shapefile as Data Type

15. Specify Output Data Element (*e.g.,* CT_merged.shp)

16. ArcToolbox – Data Management Tools – Projections and Transformations – Define Projection

17. Select merged file (*e.g.,* CT_merged.shp) as Input Dataset

18. Select Coordinate System – Select – Geographic Coordinate Systems – North America – North American Datum 1927 – OK – OK

19. ArcToolbox – Data Management Tools – Projections and Transformations – Feature – Project

20. Select merged file (*e.g.* CT_merged.shp) as Input Dataset

21. Browse to Output File location and give it a name (*e.g.,* CT_blocks00_sp83ft.shp)

22. Select Coordinate System – Select – Projected Coordinate Systems – State Plane – NAD 1983 (feet) – Chose needed area (*e.g.,* NAD 1983 State Plane Connecticut FIPS 0600 (Feet).prj) – OK

23. Set Transformation (use the Default one) – OK

<p style="text-align: center">To get Population Data:</p>

1. http://www2.census.gov/census_2000/datasets/Summary_File_1/

2. Select State

3. Download the last file in the list – *State Abbreviation* geo_ufl.zip (*e.g.*, ctgeo_ufl.zip) – Unzip

4. Rename file to the same name with the TXT extension (*e.g.*, ctgeo.txt)

5. Download the Summary File 1 (SF1) Technical Documentation at http://www.census.gov/prod/cen2000/doc/sf1.pdf

6. Print out pages 2-7 – 2-8

7. Create a new database file in Microsoft Access (*e.g.*, ctgeo.mdb)

8. Select Create Table by Entering Data

9. File – Get External Data – Import – chose your text file (*e.g.*, ctgeo.txt)

10. Chose Fixed with fields – Next

11. Place field break lines according to the field length numbers in the table on pages 2-7 – 2-8 from SF1 (Column #3 "Field Size") (note that the starting position in the document begins at 1 while Access begins at 0) – Start with Record Codes and continue to POP100 – Next

12. Store Data in a New Table - Next

13. Enter field names from SF1 pages 2-7 – 2-8 – Only name to POP100

14. Let Access add primary key

15. Import to Table *State Abbreviation* geo (*e.g.*, ctgeo.mdb) – Finish

16. Delete all records after POP100

17. File – Export – Save as *State Abbreviation*geo.dbf (*e.g.*, ctgeo.dbf) (save as type dBaseIV) – Export

<p style="text-align: center">To combine Shapefile and Database:</p>

1. Add your projected shapefile (*e.g.,* CT_blocks00_sp83ft.shp) in ArcMap Project.

2. Open Attribute Table associated with this shapefile

3. Add *State Abbreviation*geo.dbf table (*e.g.,* ctgeo.dbf) to ArcMap Project
   Note: Check the Source Tab to see and work with the table.

4. Open this dBase Table – Options

5. Add Field to dBase Table called Block_Num (Block ID Number) – select Type Text

6. Highlight Block_Num field – Right click – Field Calculater – "State Block Number" (can be obtained from the Attribute Table of your merged reprojected .shp file, first 2 digits in column "Stfid" – must be the same along the whole column, *e.g.*, "09" for CT) +[County]+[Tract]+[Block] – OK

7. Save the dBase Table

8. ArcToolbox – Data Management Tools – Add Join: Layer Name - Shapefile (*e.g.* CT_blocks00_sp83ft.shp), Input Join Field – STFID, Join Table – dBase Table, Output Join Field – Block_Num
   Note: uncheck Keep All

9. Open Attribute Table – Options – Add Field: PopBlock00, Long Integer

10. Right click on the new field – Field Calculator = dBaseTable.POP100 – OK

11. Right click on the Shapefile – Joins and Relates – Remove Join(s) – Remove All Joins

12. Open Attribute Table – Options – Add Field: Area_sqmi, Double

13. Right click on the new field – Calculate Geometry: Property – Area, Units – square miles

14. Open Attribute Table – Options – Add Field: PopDen, Double

15. Right click on the new field – Field Calculator = PopBlock00/Area_sqmi – OK