Delaware County
Regional Planning Commission

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Population Projection Methodology

In order to project the population of Delaware County, the DCRPC used a combined method with two different approaches; one is a top-down, and the other is a bottom-up approach. The top-down approach (the Step-Down Method) projects the county population based on the nation and state population projection conducted by the US Census Bureau. The bottom-up approach (the Housing Unit Method) projects the county and jurisdiction population based on the development trends in the study area, such as building permit issues or subdivision/ rezoning information.

The RPC used the Step-Down Method to project the Central Ohio Metro-area population and the county populations in the metro-area, based on the past 40 years' population data and the projected population growth rate of Ohio, provided by US Census Bureau. The RPC projected the number of new building permits issued by the county, and by each jurisdiction, based upon the projected population growth rates and the building permit trends for the past 20 years. Then, the RPC used the Housing Unit Method estimated the population from 2010 to 2012, project the population from 2013 to 2015 and 2020 to 2030 for each jurisdiction in the county. The detailed explanations of the projections are in paragraphs A and B below.

A. Step-Down Method

1. The Given Data: (From 2010 U.S. Census Bureau)

    a. Population Information from 1990 to 2010:
        by county;
        by metropolitan area in Ohio, Ohio State and United States.

2. Procedure:

    a. Project Population of Central Ohio Metro Area:
        calculate the ratio of growth for each decade by metro area;
        calculate the unadjusted population based on the average ratio;
        project the population based on the step-down model.

    b. Project Population of County in Central Ohio:
        calculate the ratio of growth for each decade by county;
        calculate the unadjusted population based on the average ratio of growth;
        project the population by county based on the step-down model;
        convert population in April of year *(Census break time)* to the projected population at the end of year.

B. Housing Unit Method

1. The Given Data:

    a. 2010 Census Data:
        Demographic Profile Data (DP-1) for General Population and Housing Characteristics;
        Population by race, sex, and age;
        Housing Tenure and Households by type.

    b. Development Trends:
        Number of New Building Permits issued by jurisdiction since 1981;
        Subdivision/ Rezoning Information (not included in this package).

    c. Projected Growth Rate in Central Ohio:
        Projected Growth Rate from 2010 to 2030 in Delaware County.

2. Procedure:

    a. Based on Census 2010 data, estimated population to the end of 2011 and projected population from 2012 to 2015 by Housing Unit Method using following factors:
        New building permits issued since 1980;
        Annexation;
        Housing unit vacancy rate by jurisdiction;
        8 months construction time after getting building permits before occupancy.

    b. Project the number of building permits to 2030 by jurisdiction.

    c. Project the population to 2030 by jurisdiction based on:
        Projected building permits to 2030;
        Build-out population for each jurisdiction;
        Housing Unit Method (same as Step A).

The DCRPC staff updates this data every year, so the updated package will be sent annually to our constituents as a part of our services. If you have any questions regarding this package, please contact the DCRPC office at (740) 833-2260 or contact:

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