

Human Population Growth and Distribution in Southeast Michigan

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Background

During the 19th and first half of the 20th Centuries, immigrants and farmers moved to big cities for the opportunity of higher income jobs in industry. By the middle of the 20th Century, with greater accessibility offered by the automobile, big city residents were moving away from urban centers, seeking suburban areas with more space and within driving distances of their work place. Suburbanization and the post-war baby boom generation filled in what are now the inner-ring suburbs. By the end of the 20th century, continued decentralization of traditional urban population centers affected the core cities in southeast Michigan (SEMCOG, 2002).

Southeast Michigan's population growth rate and pattern of expansion has followed a similar pattern experienced in many major metropolitan areas around the country (SEMCOG, 2001). All of the counties in southeast Michigan have experienced population increases, with the purchase of farmland for subdivisions and the clearing of woodlots for developments. People who moved farther away from the urban centers to enjoy the rural and suburban life are now finding that the city is moving to them; places that were once rural have been experiencing an outward push by urban areas.

Population growth and widespread distribution in southeast Michigan puts pressure on the ecosystem. Uncontrolled growth of urban areas poses serious threat to the natural environment, agricultural and energy resources, and to human health and quality of life. Human population growth and expansion can:

- increase impervious surface and lead to stormwater runoff problems;
- decrease wildlife habitat;
- increase water and air pollution;
- increase herbicide and pesticide use; and/or
- introduce non-native invasive species.

However, growth can be managed in ways that protect significant natural areas, conserve natural resources, protect essential ecological processes (e.g., groundwater recharge, stream flows), and prevent pollution (especially smog and hazardous wastes).

Status and Trends

The City of Detroit's population increased more than six-fold during the first half of the 20th Century, due largely to a massive influx of eastern European and southern migrants coming to the area for the burgeoning automobile industry. However, by 2018, Detroit's population had decreased to slightly under 650,000 residents, one-third the population the city boasted at its peak in the 1950s (Figure 1). Detroit's population decline has been one of the largest in the United States.

In 1900, the total population of southeast Michigan, a region including Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw, and Wayne Counties, was nearly 600,000. More than a century later, in 2018, southeast Michigan's population was just over 4.7 million (SEMCOG, 2018). This region experience steady population growth between 1900 and 1970, followed by relatively stable population level between 1970 and 2018 (Figure 1).

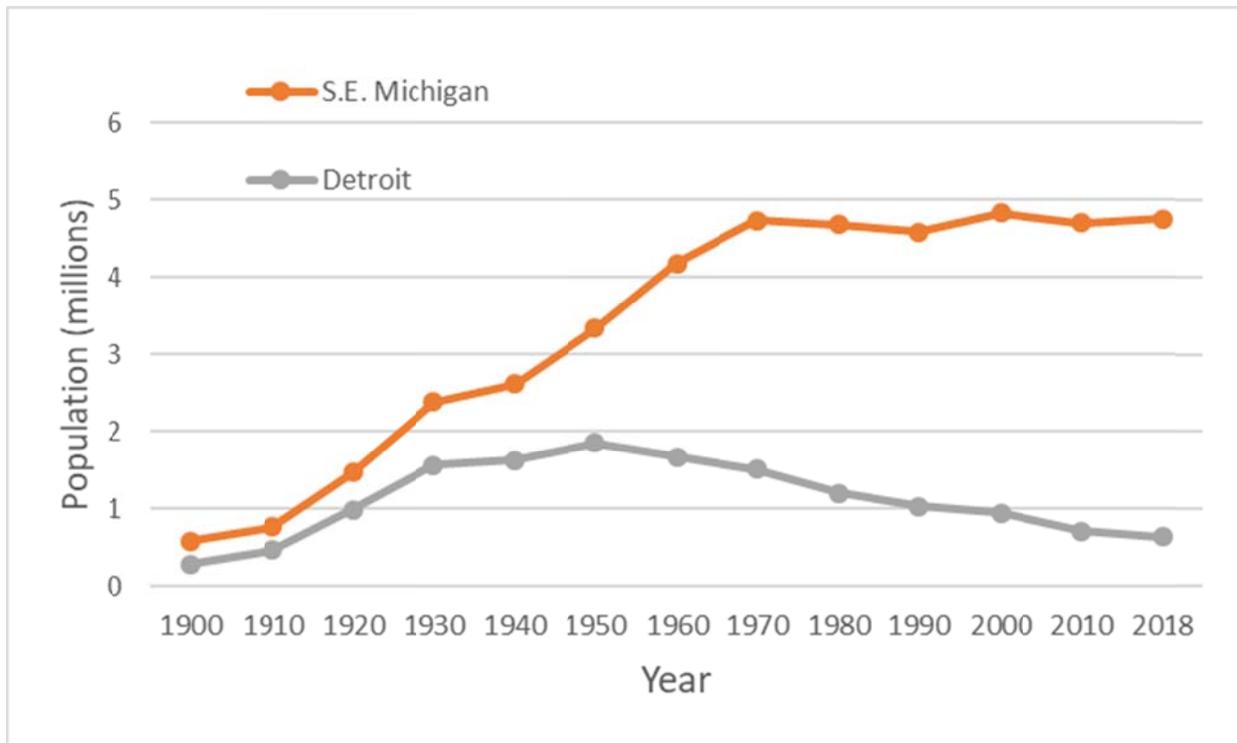


Figure 1: Population in Detroit and southeast Michigan from 1900 to 2018 (Data source: U.S. Census Bureau and Southeast Michigan Council of Governments).

The population distribution has changed substantially in southeastern Michigan between 1900 and 2018. Wayne County's dramatic population growth occurred between 1900 and 1950, followed by a 35% decline between 1970 and 2018. In contrast, Oakland, Macomb, and Washtenaw counties experienced steady growth from 1950 to 2018 (Figure 2). This pattern indicates people moving out of Detroit to surrounding areas. Oakland County has experienced the most growth, with the northern townships increasing 40% since 1990. As of 2018, the fastest

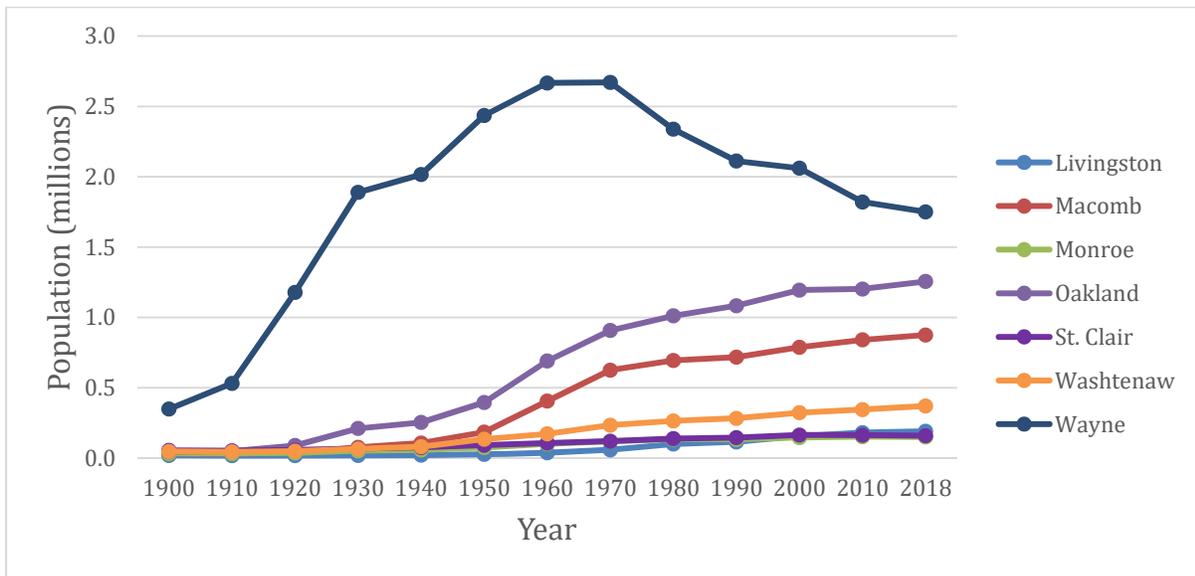


Figure 2: Population fluctuations in southeast Michigan by county, 1900-2018 (Data source: U.S. Census Bureau and Southeast Michigan Council of Governments).

growing areas in the region are in Macomb, Oakland and Washtenaw counties, whereas Wayne County continued to exhibit substantial population decline (SEMCOG, 2018).

The region added nearly 4.2 million people between 1900 and 2018. At the beginning of the 20th Century, Wayne County was the only urbanized population center. By the beginning of the 21st Century, Oakland and Macomb counties had joined Wayne County in becoming urbanized population centers (Figure 3). This reflects the overall shift from agrarian to urban living over the past 100 years (SEMCOG, 2002).

The Southeast Michigan Council of Governments produces a new growth forecast once every five years. In their most recent forecast through 2045 (Figure 4), it is estimated that by 2027, southeast Michigan's population will exceed its 2001 peak of 4.849 million, and by 2045, the population will reach 5.1 million (SEMCOG, 2017).

Management Next Steps

Population growth can dramatically change communities and landscape. As new dwellings, businesses, and industries are built or expanded, land is converted from one use to another to accommodate that change. As development expands across suburbs and once rural landscapes, traffic congestion, commercial strips, and the destruction of a more pastoral landscape push

people who seek open space further into the countryside. They are aided by a fast and efficient road network and relatively low land prices.

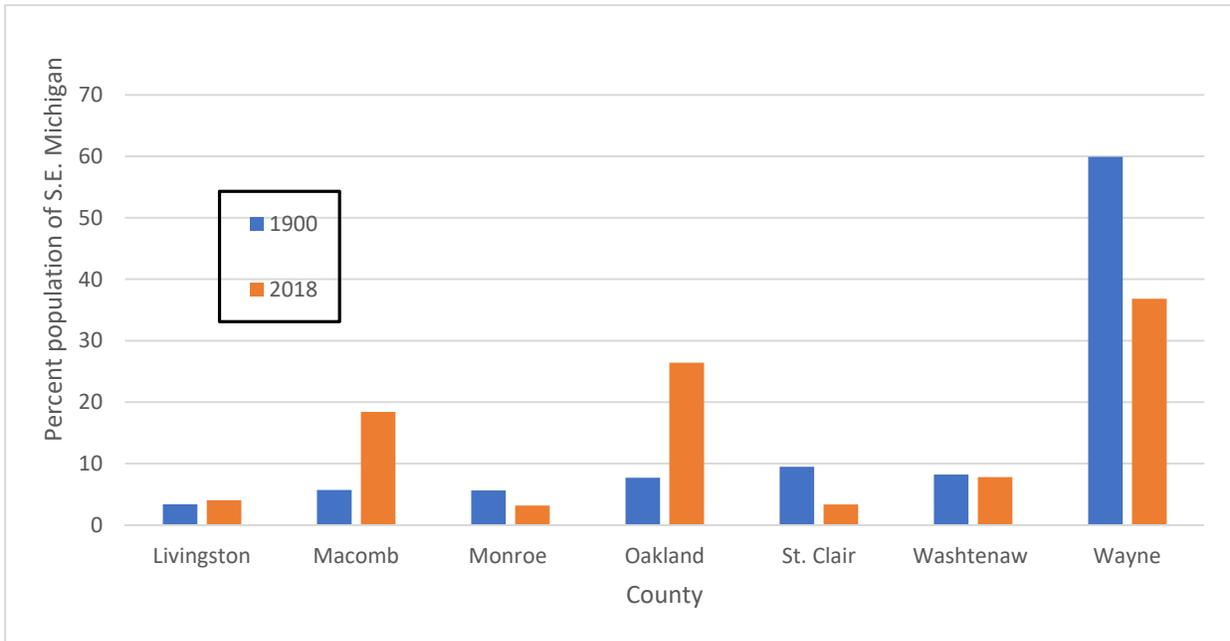


Figure 3: Percent of the population of southeast Michigan in each county in 1900 and 2000 (Decennial Census, U.S. Census Bureau).

SEMCOG Population, 1990-2045

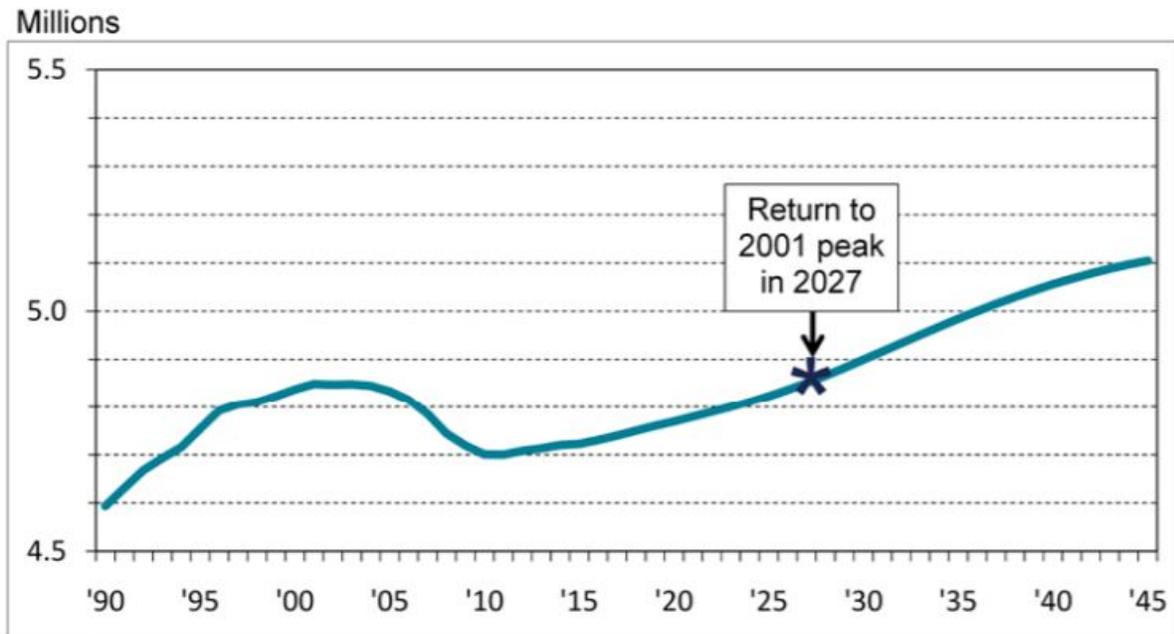


Figure 4: Population forecast of southeast Michigan from 1990-2045 (SEMCOG, 2017).

As people seek the "good life" further and further out from the urban core, land, energy, natural resources, and open space disappear. The land use pattern that results is costly to service and, over time, results in a loss of the very qualities sought by those who moved there. As the transportation system expands into previously undeveloped or minimally developed areas, water and air pollution can increase and wildlife habitat can be fragmented or lost.

The southeast Michigan region and its communities need to utilize growth management techniques that systematically guide the type, rate, location, timing, public cost, and quality of land development to support growth, while preserving quality of life. Promising techniques include:

- purchase of development rights;
- transfer of development rights;
- concurrency (pay as you go);
- urban and general services districts;
- development agreements;
- regional impact coordination; and
- interjurisdictional growth management.

Further, special efforts should be expended to integrate land use and transportation planning in southeast Michigan to better manage growth through the regional efforts. This could include:

- reaching agreement on a regional sustainability vision (i.e., economic, societal, and environmental) and signing a partnership agreement to generate cooperation amongst communities and businesses;
- empowering Southeast Michigan Council of Governments to expand its capability to map, inventory, and predict changes in population, land use, and transportation trends (e.g., 2045 Regional Development Forecast; SEMCOG, 2017);
- identifying constraint areas from an environmental and servicing perspective in order to indicate where development is and is not appropriate;
- developing regional sustainability policies to preserve key ecosystem features and quality of life (e.g., public transportation, minimizing nonpoint source pollution, stopping floodplain encroachment, limiting impervious surface area development. etc.); and
- proactively working with communities to implement policies and undertaking state of the environment/economy/society reporting every three to five years.

Continued priority should be given to educating the public about the environmental and natural resource consequences of population growth, population density, land use, and transportation

practices. Developers along with land use and transportation planners need more education on sustainable design.

Research/Monitoring Needs

Southeast Michigan Council of Governments must continue to track population trends and predict future growth and distribution patterns. Also, more research is needed that integrates population trends with land use and transportation planning on a regional scale. Innovative best management practices must be identified that preserve quality of life and sustain our communities, economies, and environments. A combination of incentives and regulatory tools needs to be used to better manage growth and ensure sustainability.

References

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