



Gentrification, Population Change, and Electric Grid Investment in Detroit

WE THE PEOPLE MICHIGAN

POLICY & RESEARCH BRIEF

July // 2023

INTRODUCTION

The City of Detroit has gone through extensive population loss as measured by the US Census Bureau. Much of Detroit's population loss can be attributed to middle class Black people leaving for better schools, increased safety, or a combination of many factors. The out-migration of Black families from dense neighborhood clusters in the Northwest and Far East of Detroit are juxtaposed with the in-migration of single, white people to the Greater Downtown area. These migration patterns are marked by economic development and service disparities described as "two Detroits." Gentrification, or the process of a poor urban area changed by wealthy people moving in, is simply not an adequate term to define the developmental change process in Detroit where willful neglect and decay go hand-in-hand.

KEY POINTS:

1. DTE investments primarily benefit areas of white population growth;
2. Long-term investments and their outcomes will increasingly benefit higher income and more white census tracts;
3. DTE's "equity" analysis fails to account for the results presented in this brief.

BACKGROUND

Detroit had a historic loss of over 25% of its population between 2000 and 2010. Although the 2020 Census was not without controversy or political meddling, the numbers present the best estimate to date of population change. Between 2010 and 2020, Detroit's population

dropped an estimated 10.5%.¹ DTE Electric (DTEE) has claimed that it makes investment decisions based on population density and job density. Population growth is not density (people per sq mi) and shows DTEE is not following their own investment guidelines in their "City of Detroit Initiative" (CODI) for electric grid modernization.²

TABLE 1: Demographic Change in Areas on DTEE Hardening Schedule Compared to City of Detroit Initiative (CODI) Areas

| Indicator | CODI | Hardening | | | |
|-----------------------------------|-------|-----------|----------------|----------------|----------------|
| | | Total | 2018 - 2019 | 2020 - 2022 | 2023 - 2026 |
| Tract Count | 62 | 239 | 23 | 84 | 133 |
| Population Change 2000-2020 | 11 % | -26 % | -24 % | -16 % | -39 % |
| White Population Change 2000-2020 | 115 % | -12 % | -28 % | -9 % | 0 % |
| SAIDI* 2021 (Avg.=475) | 192 | 677 | 334 | 694 | 1005 |

*SAIDI = System Average Interruption Duration Index

¹ Malachi Barrett. (2023). Detroit's population slide challenges vision of revitalization. Bridge Detroit. URL:

<https://www.bridgedetroit.com/detroits-population-slide-challenges-vision-of-revitalization/>

² Direct Testimony of Satvir S. Doel Before the Michigan Public Service Commission, State of Michigan (2023) (statement of Satvir Doel, DTE Electric Company)

<https://mi-psc.force.com/sfc/servlet.shepherd/version/download/0688y000006mgBTAAY>

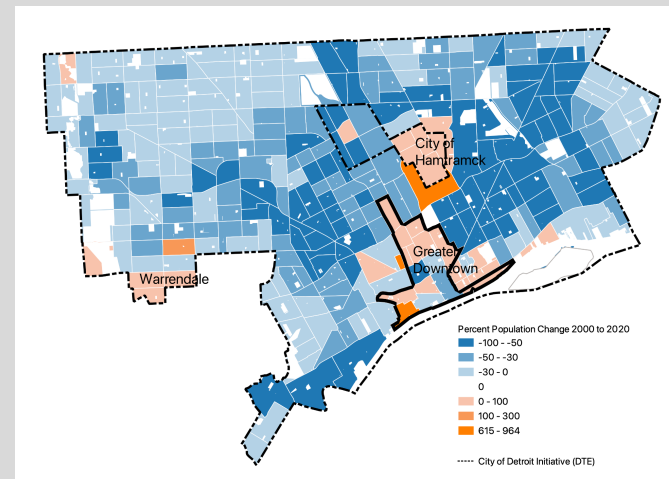
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RESULTS

City of Detroit Initiative (CODI)

Population growth has been limited and the CODI area where DTEE has targeted electric grid modernization is included. Most notably (Figure 1), white population follows “gentrification alley” (Figure 2) mirroring Woodward Avenue.³

FIGURE 1: Population Loss and Growth 2000 to 2020 in the City of Detroit⁴



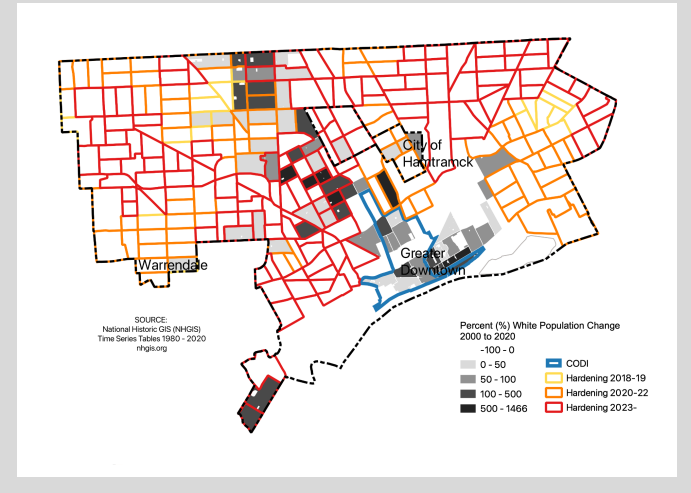
The majority of Detroit experienced population loss rather than growth, yet DTEE has selectively decided to invest in grid improvement in majority white population growth areas when their own guidelines would point to instead investing in the population dense neighborhoods that are majority BIPOC.

³ Hutchings, H., Zhang, Q., Grady, S., Mabe, L., & Okereke, I. C. (2023). Gentrification and Air Quality in a Large Urban County in the United States. *International Journal of Environmental Research and Public Health*, 20(6), 4762.

⁴ Schroeder, J. P. (2007). "Target-density weighting interpolation and uncertainty evaluation for temporal analysis of census data." *Geographical Analysis* 39(3), 311-335.

<http://dx.doi.org/10.1111/j.1538-4632.2007.00706.x>

FIGURE 2: White Population Change 2000 to 2020 with Hardening Zones



Grid Modernization and Conversion

DTE regularly cites their on-going and financially significant investment in electric grid modernization and conversion to 13.2kV. However we again find that these investments primarily benefit growing, white population areas rather than BIPOC neighborhoods with greater population density and greater need for equitable electric grid improvement.

The areas first targeted for electric grid conversion in Detroit saw 96% population growth since 2000 which was driven by a 216% (Table 2) increase in white population. The conversion map presented emphasizes the CODI zone within Detroit’s “Greater Downtown” with pockets in Rouge Park/Redford Township as well as the wealthy and majority white Grosse Pointes (Figure 3). The areas targeted for conversion from 2028-2037 align with areas already receiving substantial investment and priority for development. When these



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conversions are completed SEMCOG⁵ predicts continued population growth which can be assumed to follow similar demographic trends.

TABLE 2: Demographic Change in Planned DTEE 4.8kV Conversion Areas ("Modernization")

| Indicator | City Avg. | 4.8kV Conversion (Detroit only) | | | |
|-----------------------------------|-----------|---------------------------------|-------------|-------------|-------------|
| | | Avg | 2023 - 2027 | 2028 - 2032 | 2033 - 2037 |
| Tract Count | 297 | 83 | 10 | 49 | 24 |
| Population Change 2000-2020 | -34 % | 15 % | 96 % | -28 % | -26 % |
| White Population Change 2000-2020 | -2 % | 58 % | 216 % | -11 % | -30 % |

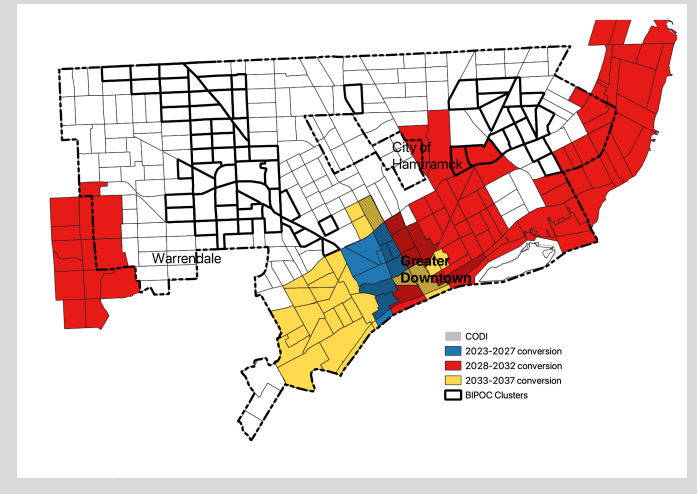
CONCLUSIONS

DTEE has blatantly ignored majority BIPOC communities in their conversion plans demonstrates their inability to adequately assess and provide equitable electrical service.

As we previously presented in our brief, "Utility Redlining: Inequitable Electric Distribution in the DTE Service Area,"⁶ DTE Energy and its subsidiaries have not conducted adequate or robust racial equity analyses on the populations they serve nor within the plans they present to

the public for increased consumer costs in their 2023 rate case filing.

FIGURE 3: DTEE Planned 4.8kV Conversion Areas by Census Tract with BIPOC Clusters⁷



Investment in population dense neighborhoods would benefit BIPOC neighborhoods as well as bordering municipalities. DTE Energy and its subsidiaries must make both good faith efforts to provide equitable electrical services as well as invest in the resources to adequately assess and evaluate their performance related to regional racial equity.

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⁵ Jeff Nutting & Chad Misiuk. (2019). "2050 Southeast Michigan Regional Development Forecast." Southeast Michigan Council of Governments (SEMCOG): Detroit, MI.

⁶ Alex B. Hill & Jackson Koeppel. (2022) "Utility Redlining: Inequitable Electric Distribution in the DTE Service Area." *We The People Michigan*. URL: <https://wethepeoplemi.org/dte/#ElectricDistribution>

⁷ Based on the map presented in pp. 35 of *Qualifications and Revised Direct Testimony of Joy H. Wang, Ph.D., Before the Michigan Public Service Commission, State of Michigan* (2023) (statement of Joy H. Wang, manager of Distribution Planning Section, MPSC) <https://mi-psc.force.com/sfc/servlet.shepherd/version/download/0688y0000086EeJAAU>

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