Dwight Neighborhood Community Health Profile

Compiled by Osman Moneer in January, 2020 for the Dwight Central Management Team¹

Key Concerns

Dwight is a low-income residential neighborhood with a major medical complex in the middle of it. Yale New Haven Hospital will build a new neuroscience center at the St. Raphael's Campus in the Dwight neighborhood. This project includes the construction of parking garages that will add hundreds more cars to weekday neighborhood traffic. Children and older adults may be especially impacted.

- 1. The **construction period** may lead to an exacerbation of health and safety problems due to noise, dust, diesel fumes, and additional obstacles for pedestrians.
- 2. Dwight has some of the poorest health outcomes among New Haven's neighborhoods. The neighborhood has **high asthma rates** for both children and adults.
- 3. In the past two years Dwight experienced 26 **pedestrian accidents** and 5 involving **bikes**. There were 106 traffic stops for **red light violations**.
- 4. Research by Dr. Richard Marottoli of the Dorothy Adler Geriatric Assessment Center at Yale and colleagues has established that **older adults** cross streets more slowly than younger people.²

Demographics

- 1. There are 4,403 people living in the neighborhood; 16% of the population is under 18, and 9% is over the age of 65.
- 2. The neighborhood's racial composition is 23% Latinx, 25% White, and 40% Black.
- 3. 87% of homes in Dwight are occupied by renters; 40% of Dwight residents live in poverty; 67% of all residents and 82% of children are considered low-income.

Details on Asthma and Health

- 1. Current asthma rates in Dwight are 12% for adults, and are estimated to also be 12% for children, compared to a statewide average of 9.7%.³
- 2. In 2018, New Haven residents had the highest asthma hospitalization rates in the State of Connecticut.
- 3. Black residents are 5.5 times as likely to suffer severe consequences of asthma compared to their white peers, while Hispanic residents are 4.5 times as likely.
- 4. New Haven experienced 1,830 hospitalizations and emergency department visits due to asthma in 2018, leading to over \$10 M in hospitalization charges across the city.
- 5. Other key health indicators: diabetes rate (adults), 11%; high blood pressure (adults), 31%.
- 6. People living near dangerous streets, with little access to open space are less likely to walk, which can affect both weight and emotional health. PM2.5 particles have been shown to be factors in obesity, cancer, diabetes, and stoke, in addition to the lung diseases including COPD.

Details on Pollution

1. The Clean Air Act is focused on six pollutants: ozone, fine particles (PM_{2.5}), carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead.

¹ Sources: CTDataHaven (2019). Connecticut Health Foundation (2020). Connecticut State Department of Health. Department of Energy & Environmental Programs (DEEP). City of New Haven Police Department and Board of Education.

² Richard A. Marottoli et al, "Characteristics of Older Pedestrians Who Have Difficulty Crossing the Street," American Journal of Public Health, March 1997, Vol. 87, No. 3, 383.

³ The child asthma rate was estimated by analyzing statistics on asthma rates for Connecticut children segmented by household income in conjunction with Dwight resident income information

- 2. Connecticut is currently in non-attainment status for ozone and maintenance status for particulate matter, including fine particles. This suggests active work needs to be done to minimize the sources of these pollutants, which are largely sourced in transportation.
- 3. Mobile source (vehicles, engines, etc.) pollution accounts for approximately 50% of all man-made air pollution emitted in Connecticut.
 - a. Vehicle exhaust primarily emits fine particle pollution and carbon monoxide, causing serious health concerns.
 - b. Diesel-powered engines produce black carbon, a significant contributor to global warming, and emissions of toxic air pollutants, along with carbon dioxide (CO₂) and PM_{2.5}. Black carbon is not presently listed as a "criteria pollutant" but that is likely to change soon. It comes from vehicular exhaust, and also from brake linings and tires so even electric vehicles produce this substance.
- 4. Idling vehicles in traffic, at bus stops (see below), or at points of entry and exit from garages, may exacerbate health concerns.
 - a. An idling vehicle spews air toxics, gases and particulate matter ("soot") into the air.
 - b. Every gallon of gas burned produces more than 20 pounds of greenhouse gases.
 - c. Breathing in exhaust can aggravate asthma, allergies, and cardiovascular disease.

Map of Neighborhood School Bus Stops within Two-Mile Radius of St. Raphael's Campus

