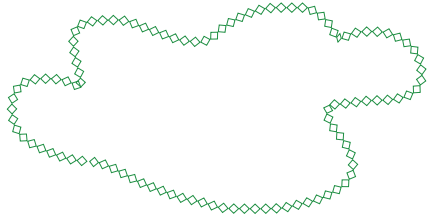
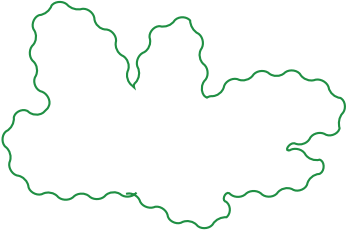


STRATEGIES FOR THE NEIGHBORHOOD

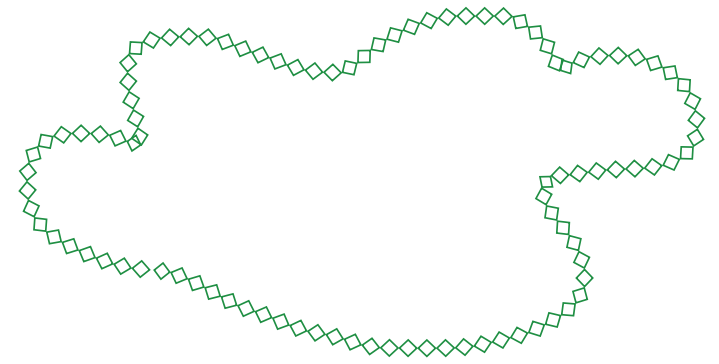


Prepared by Yale Urban Design Workshop
for the Dwight Healthy and Just Neighborhood Project₁

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Living with pollution

This guide provides some information about terms and ideas related to air quality. As part of the Dwight Healthy and Just Neighborhood Project we are producing information to help the neighborhood understand what the quality of the air is, and what to do about it in the short-term and long-term. Check out the live air quality on the neighborhood website dwrightneighborhood.info and find out more about the project!



Mitigating pollution

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Living with pollution

Use real time monitoring and education to reduce the hourly and daily impact of low air quality, especially on groups most susceptible.

1 Deploy air quality monitoring devices

Find an air quality sensor provider and install and activate devices in your neighborhood to track air quality. Make monitoring data available to the public through open channels.



2 Provide education around air quality

Finding ways to educate around the ways air quality is measured, such as the Air Quality Index (AQI) and what kinds of action can be taken by individuals, groups and communities.

3 Encourage energy efficient homes

Encourage energy efficiency in homes so that windows can be closed on days with the AQI exceeds recommended levels and residents stay home.

4 Use historical air quality data

Use historical air quality data captured locally to argue for the improvements above.

Mitigating pollution

1 Vehicles

Gas-powered vehicles are responsible for up to 70% of environmental pollution. Strategies can be put in place that encourage alternative forms of transportation.

1.1 Improve walking routes

Make improvements to the public realm in order to make pedestrians more comfortable and safe. Reduce crossing distances and traffic speeds through street section interventions. Plant trees and provide cooling shelters at intervals along streets to reduce sun exposure. Keep sidewalks in good repair. Use traffic tables for crossings to ensure accessibility for people of different abilities.

1.2 Improve cycling routes

Create safe, separated bicycle lanes connected in networks to appropriate destinations, to encourage commuting by bicycle. Provide secure bicycles storage in destination areas, like around the hospital and grocery. Encourage inclusion of bicycle storage solutions for any new or renovated residential project. Provide cycling education and helmets. Encourage local bicycle share programs.



1.3 Provide options for e-bikes

Encourage the use of E-bikes for commuting. Make residents aware of state level rebate and incentive programs for purchase of e-bikes. Encourage inclusion of bicycle storage solutions for any new or renovated residential project. Encourage local e-bike share programs.



1.5 Electrification

Advocate for electrification of the full range of vehicles: school buses, ambulances, regional buses, and private cars. Provide appropriately located charging stations throughout the neighborhood.

1.4 Improve public transit

Encourage use of public transit by locating stops in high demand locations. Provide attractive, well-maintained shelters.



Encourage energy efficiency and electrification of buildings. Household, commercial and institutional buildings burn fuel for heat, which contributes to pollution.

2.1 Discourage burning biomass

Discourage burning of biomass fuels, including wood, wood pellets, etc.

2.2 Reduce energy usage

Encourage homeowners to make energy efficient improvements. Consider partnering with programs such as Neighborhood Housing Service's "I Heart My Home" program.



2.3 Produce power locally

Power can be produced locally by encouraging roof-mounted solar arrays on buildings.



2.5 Plant trees

Use trees to improve energy efficiency by taking advantage of seasonal coverage.

2.4 Reduce heat-island effect

Encourage building owners to improve energy efficiency with strategies that also reduce heat island effect—high albedo roofing, light colored finishes.



Mitigating pollution

3 Green Space

Improving, repairing, and expanding green space and street trees can help reduce pollution levels in the air.



3.1 Restore street tree canopy

Restore the street tree canopy throughout the neighborhood, but especially on high traffic streets. Inventory and maintain trees on a regular schedule to keep the canopy in good repair. Choose hearty urban trees resistant to urban tree blights.



3.2 Encourage planting

Encourage homeowners to plant trees and other vegetation on their personal property.

3.3 Strategic placing of vegetative barriers

Concentrate trees and vegetative barriers along corridors with higher concentrations of air pollution—for instance along Whalley, the Boulevard, etc.

Satisfying multiple needs

Make sure any investment in the built environment can perform multiple roles and satisfy multiple needs. For instance: street trees reduce air pollution, reduce heat-island effect, increase attractiveness and therefore for pride and satisfaction of living in the neighborhood, increase biodiversity and provide habitat, reduce flooding, etc. Bicycle lanes reduce reliance on cars and also encourage a healthy lifestyle and may also create local jobs (bicycle repair shops).

Deploy integrated design thinking

Confirm that any improvement in the built environment integrates with various priorities rather than addressing them one by one; Make sure projects integrate with each other so that the result is greater than the sum of parts.

We would love you to get involved
with the Dwight Healthy and Just
neighborhood project!

Check out the website to
get in touch!



dwrightneighborhood.info