



Enhancing **Traffic Circulation** and Creating **Low-Stress Bicycling Routes**

A Comprehensive Plan for the Pleasant Street Neighborhood in Dorchester, MA

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Traffic Pattern

Typical traffic ▾

Fast    Slow

S  T W T F S

Monday, 5:35 PM


8:00 AM 12:00 PM 4:00 PM 8:00 PM

Columbia Rd

Stoughton St

Pleasant St

Dorchester Ave

Hancock St

Main Objectives

1

Get **through traffic** out of the neighborhood

Drivers whose origin and destination are **miles away** from the neighborhood must **NOT** be allowed to drive through the neighborhood.

2

Create **low-stress** bicycling streets

Provide a **safe**, **comfortable**, and **enjoyable** experience for cyclists, minimizing their exposure to **high traffic volumes and speeds**.

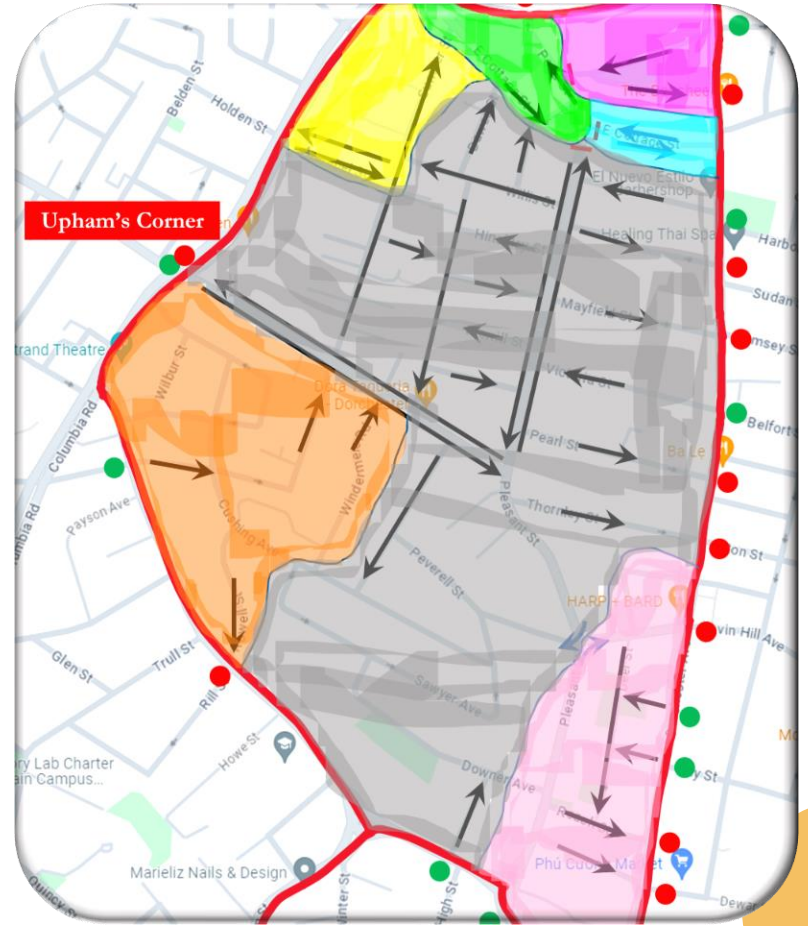
3

Maintain easy **access** to homes

Any changes to the road network should not significantly **inconvenience** those living in the neighborhood.

Sectioning the Neighborhood

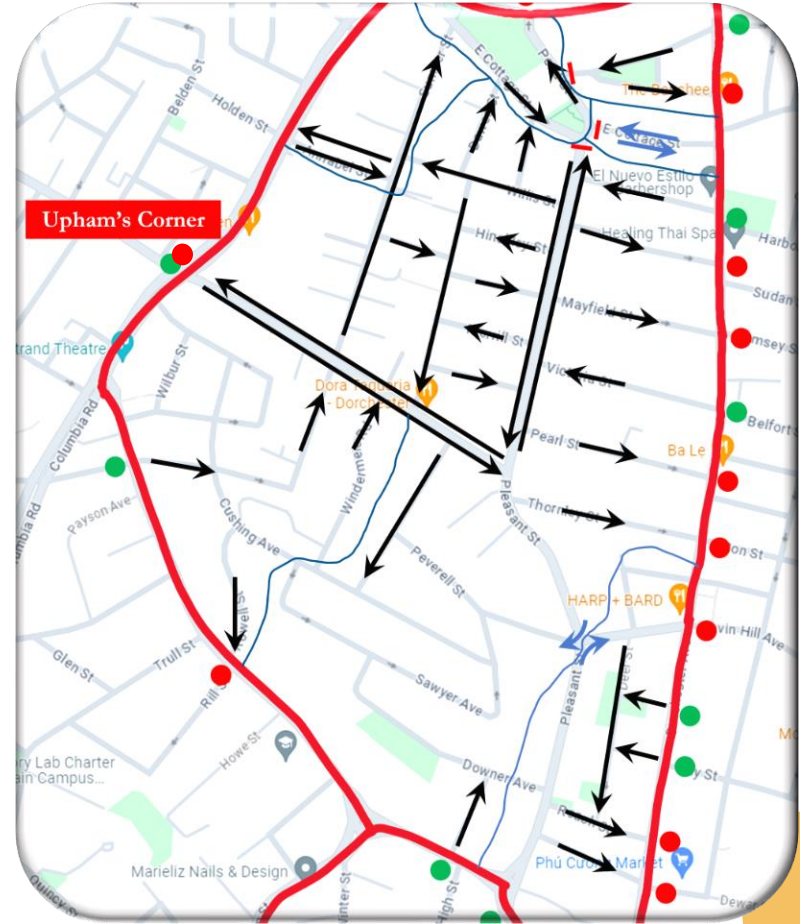
- ❑ Local traffic enters and exits the neighborhood from the **same** section
- ❑ All blocks within the neighborhood should be **accessible** by residents
- ❑ **Yikes!** Eastbound through traffic can still cut through but there is a **low demand** for that.



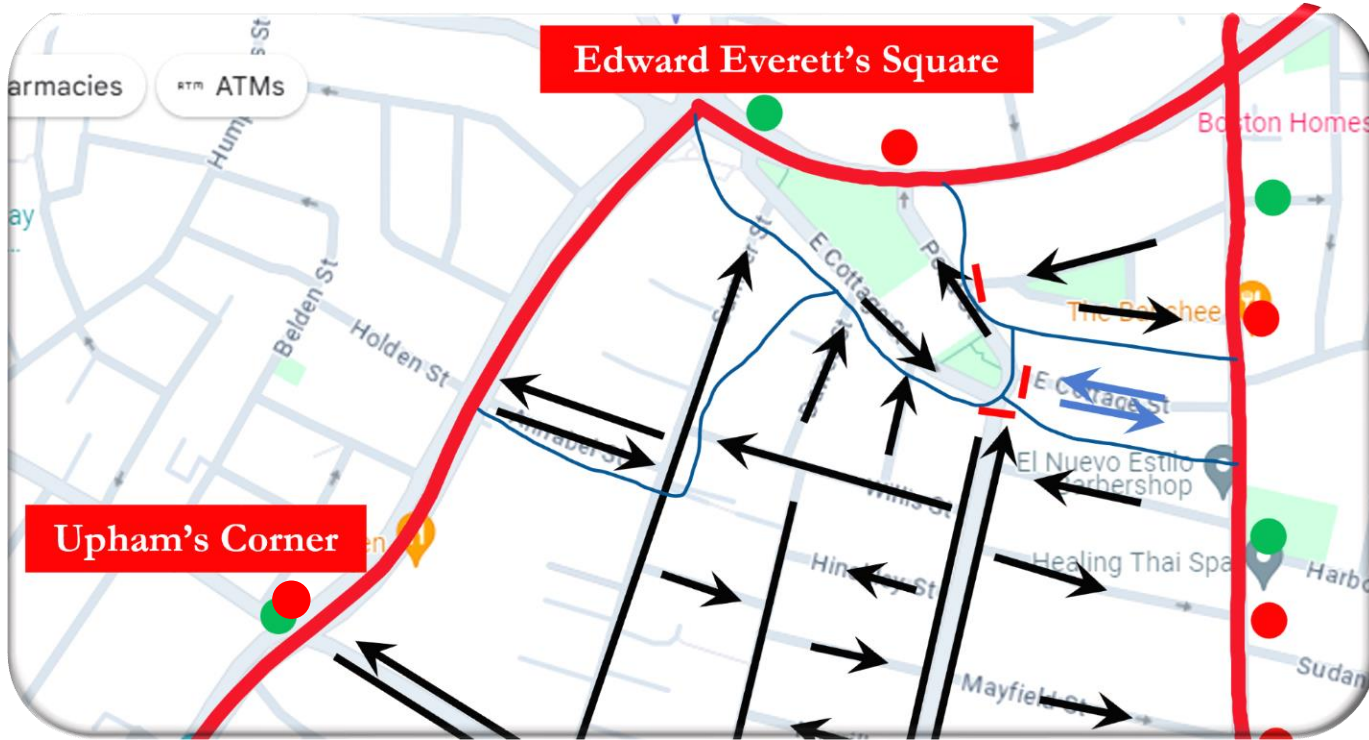
Full Traffic Circulation Plan

Legend

- Exit point
- Entry point
- ← Existing traffic flow direction
- ➡ New traffic flow direction
- Street closure
- ↻ Diagonal diverter



Northern Region

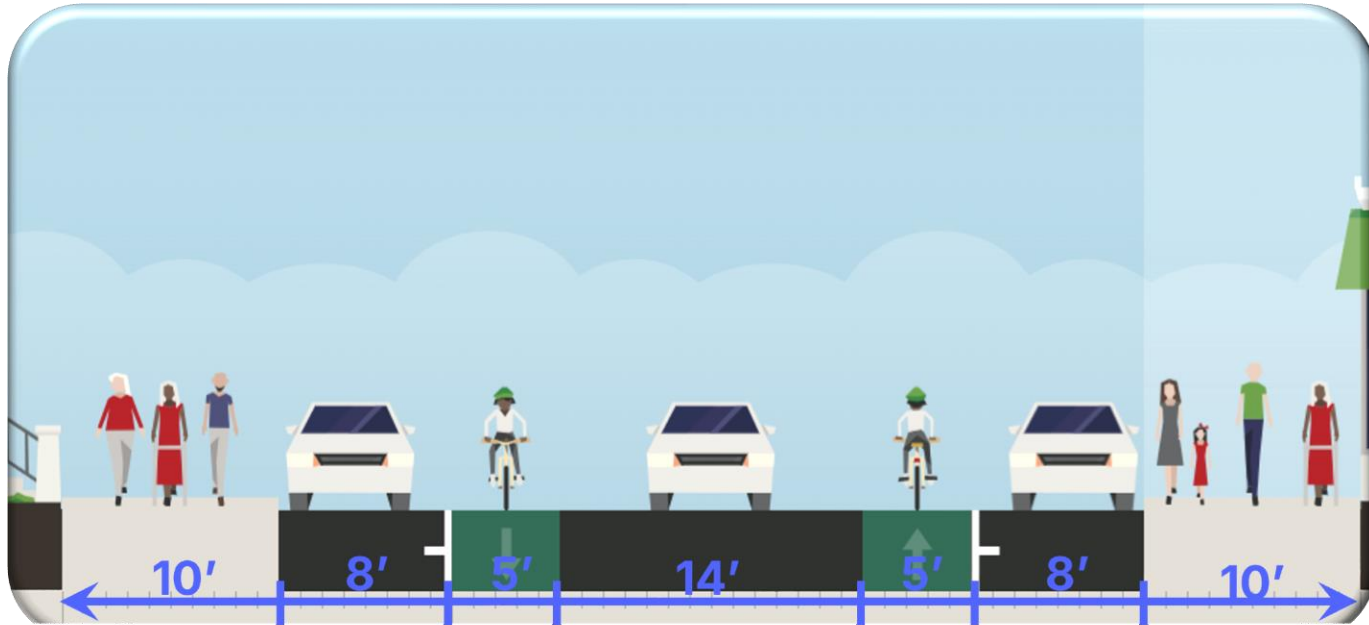




Low-stress Bicycling



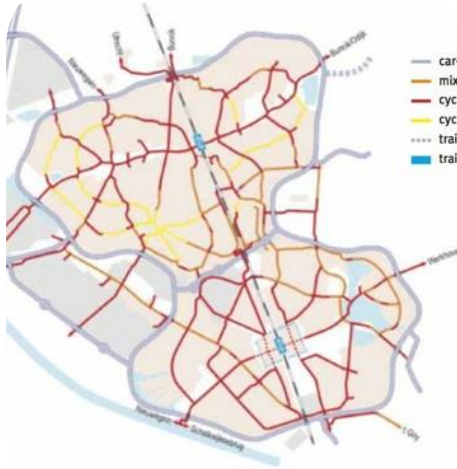
Making Pleasant St pleasant for cyclists with advisory lanes



Dutch inspiration



Principle of Filtered Permeability



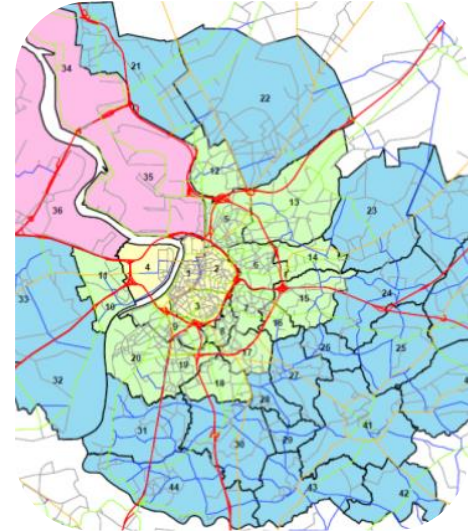
Houten, NL

Population: ~50,000



Groningen, NL

Population: ~245,000



Leuven, BE

Population: ~105,000

Street Closure (The Hague)



Turning loop

(52°04'14.0"N 4°18'58.9"E)

Diagonal Diverter (The Hague)



(52°04'22.0"N, 4°18'51.2"E)



<https://nacto.org/publication/urban-bikeway-design-guide/bicycle-boulevards/volume-management/>

Advisory Bike Lanes (Utrecht)



(52°05'34.3"N 5°05'25.6"E)

dank je!!!

