

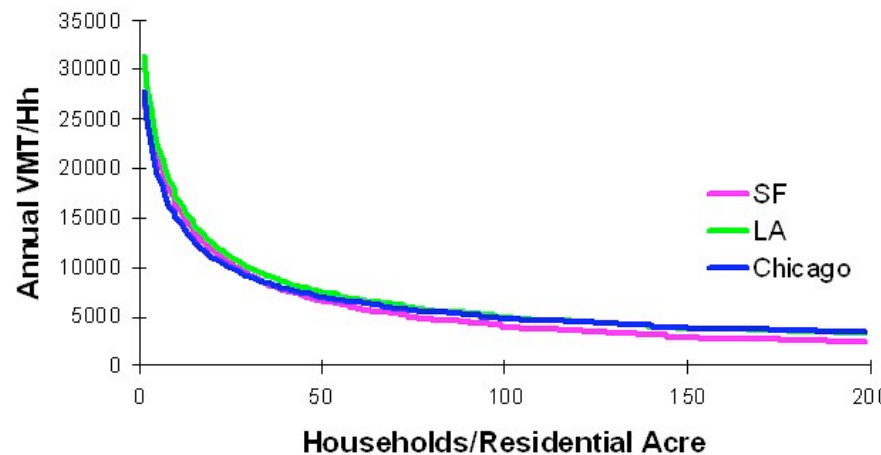
The Environmental Paradox of Density



Kaid Benfield, NRDC

Let's Start With the Good News: Density Helps the Environment

Driving vs Residential Density



Runoff Volume per 100 units

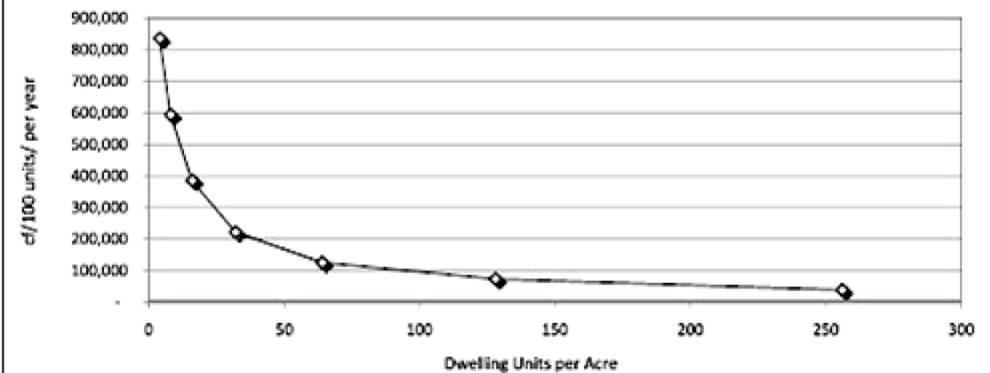


FIGURE 5. Runoff Volume, Per 100 Units Per Year, as a Function of Dwelling Units Per Acre, Model Scenario.

The Face of Smart Growth as We Advocate It



Pretty nice, no?

The Actual Face of Smart Growth In Some Cases



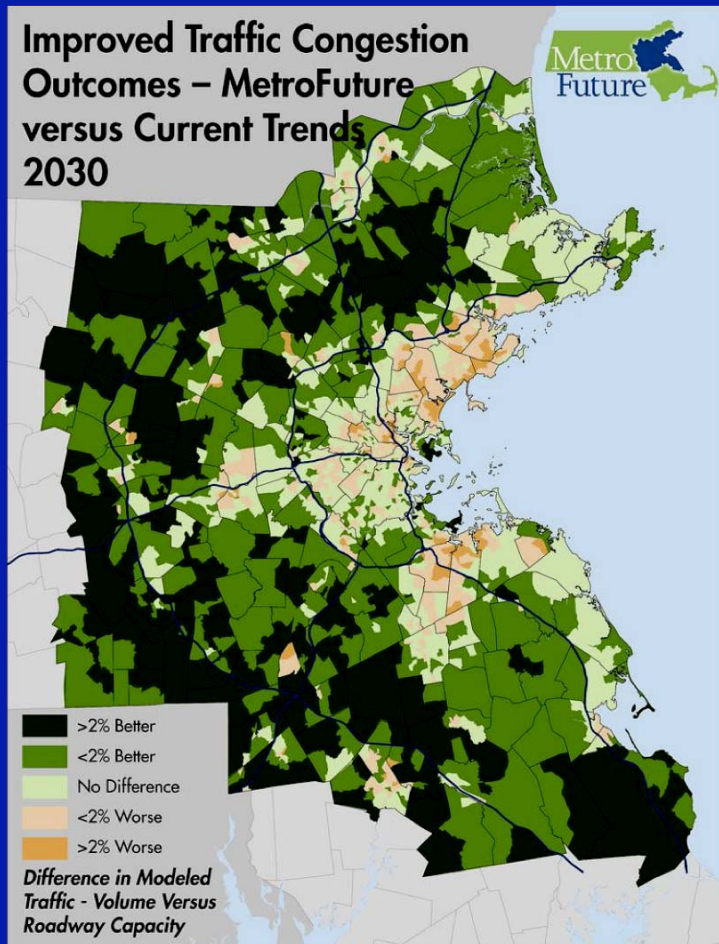
Put Another Way:



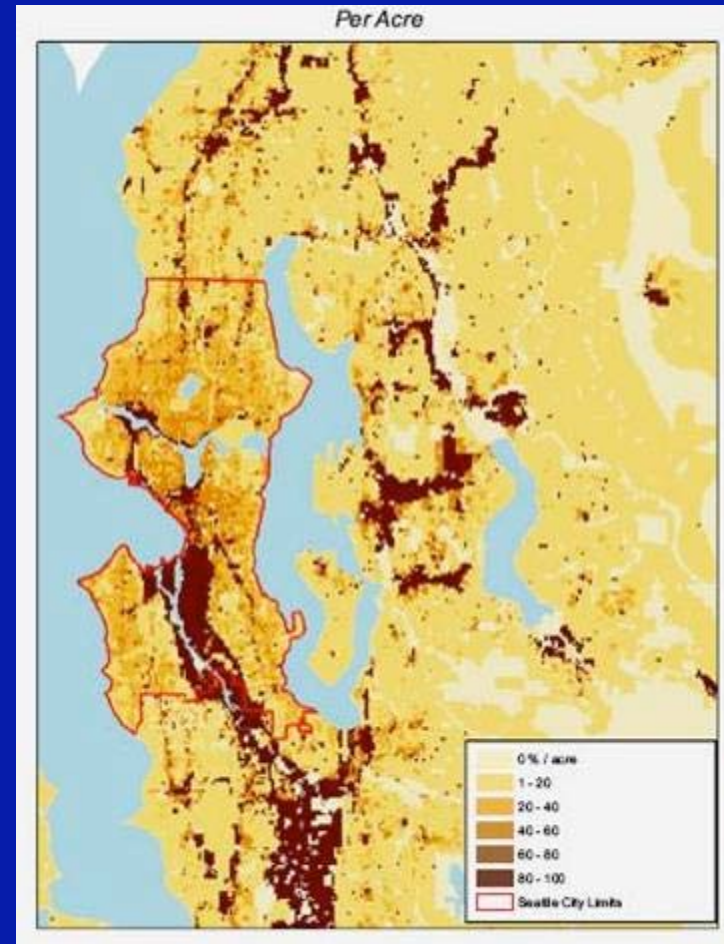
“I’m willing to go down 10, 20, even 30 points in Walk Score if it gets me away from this noise.”

- Melanie, in Austin TX

The Bad News: Local Impacts of Density

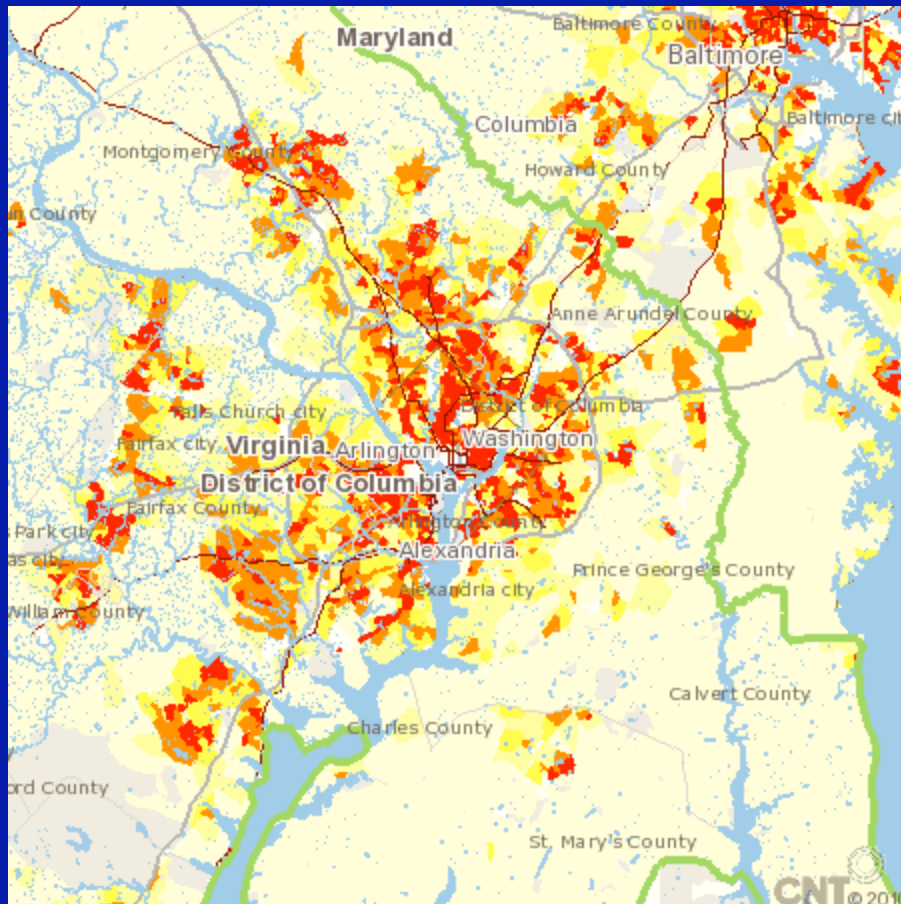


Traffic

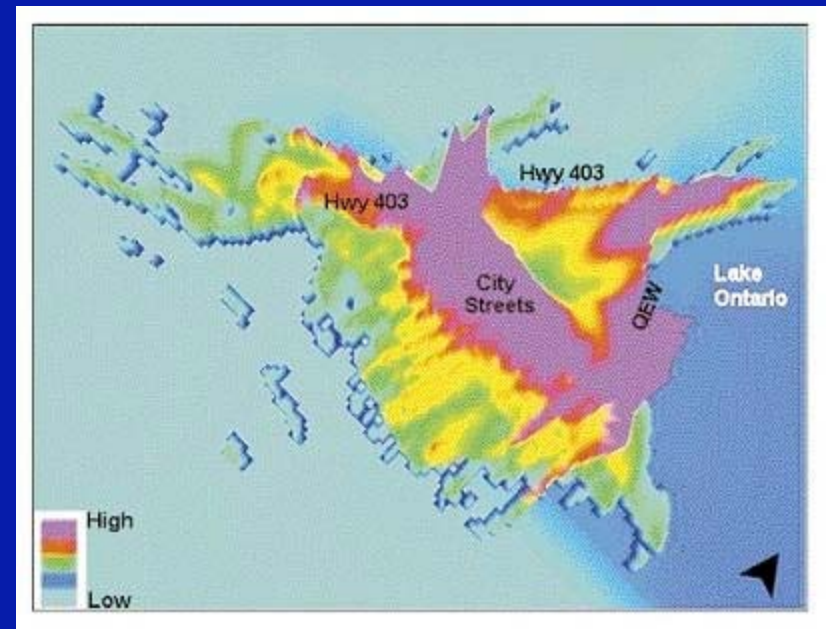


Runoff

Emissions



CO₂ per acre



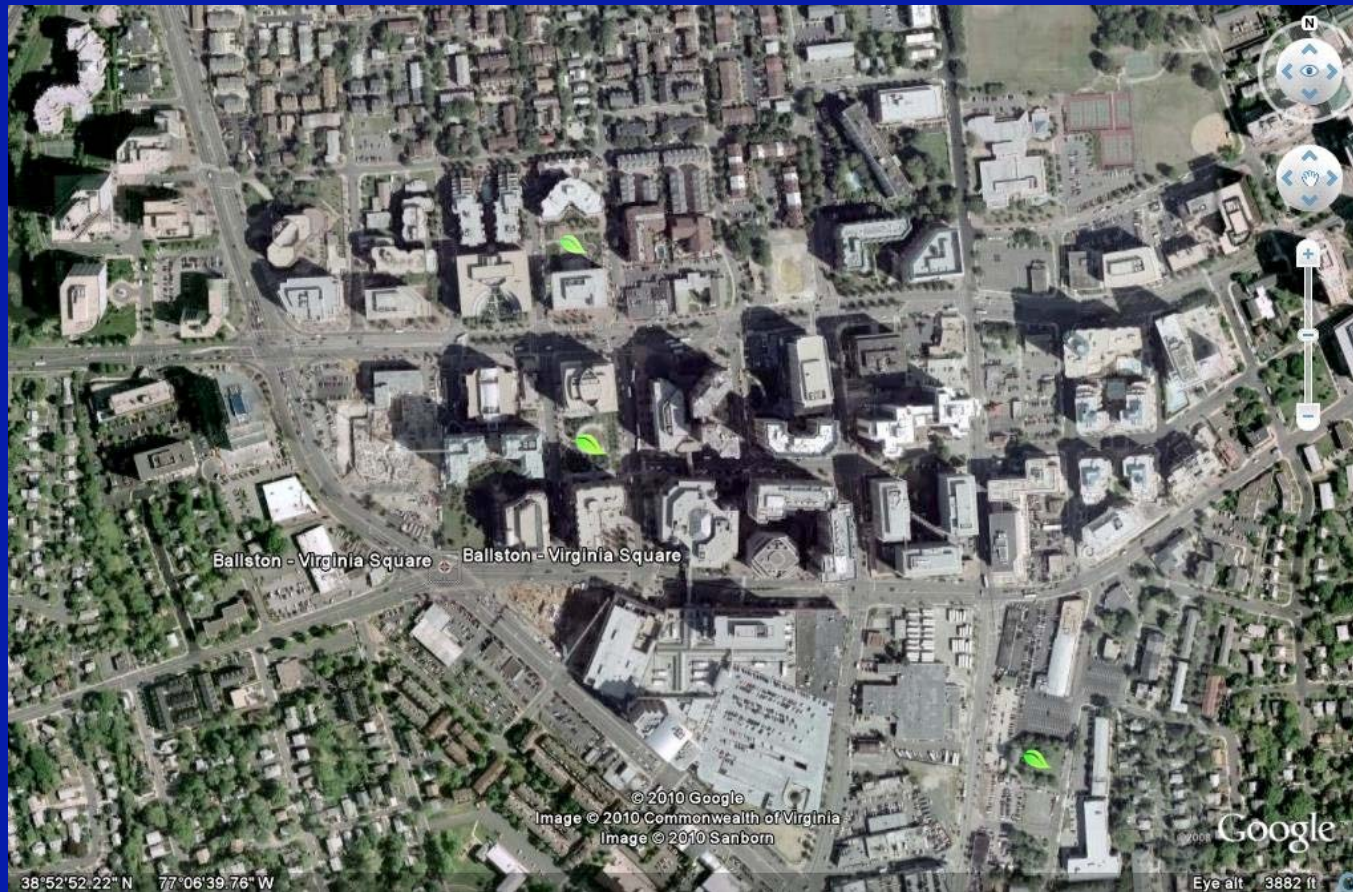
VOCs

The Environmental Paradox of Density



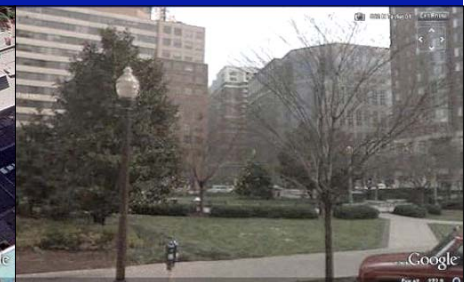
To limit environmental impacts, we
increase them in some places

Kaid's Pet Peeve: Limited Green Space



Transit Area Stats

- 240 acre planning area
- Population as of 2000: 10,944
- Development 1980-2005
 - 6584 dwelling units
 - 6.37b ft² office space
 - 958K ft² retail
- Total park space: around 3 acres, some restricted (0.27 acres/1,000 people)
- Most US cities have 5-35 acres of parks per 1,000 people





“You work so hard to get a house and then someone puts this project in your face and they don't give a hoot about you“

- Ever DuBose, Washington DC

Why Not More Like These?



12 units/acre



39 units/acre + 212K ft²



148 units/acre



20 units/acre

The Environment Doesn't Require *High* Density

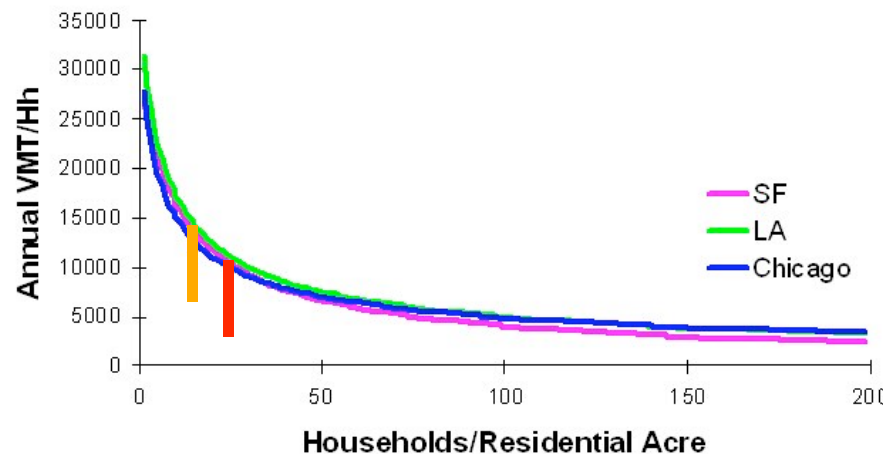
10 homes/ac



22 homes/ac



Driving vs Residential Density



Runoff Volume per 100 units

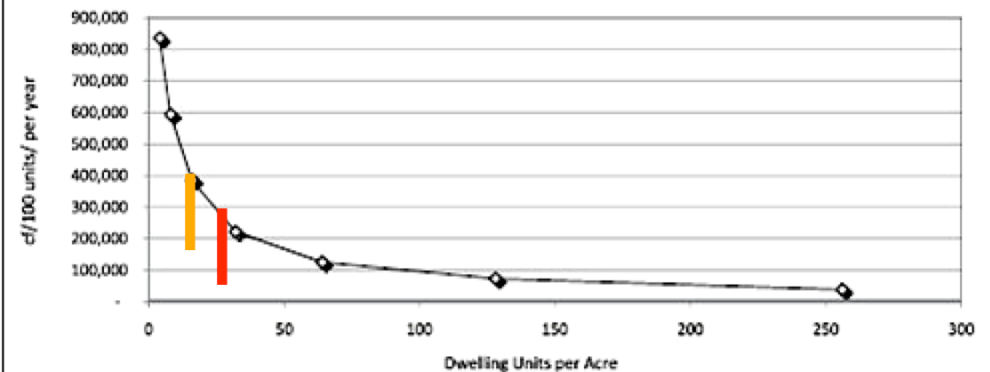


FIGURE 5. Runoff Volume, Per 100 Units Per Year, as a Function of Dwelling Units Per Acre, Model Scenario.

But We Can Make Even High Density Greener

Berlin



Finland Embassy



Japan



Copenhagen



It's Not 1995 Anymore

- Revisit the product & make it better
- Earn more support by deserving it
- Leave a legacy to be proud of



Kaid's Formula for Addressing the Environmental Paradox of Density

- Understand that **density brings consequences**
- Mitigate & compensate for them
- Create better ambassadors for density & smart growth



Thanks!

My blog: www.kaidbenfield.com