

Blueprint for a Better Region

Putting Development in the Right Places



Coalition for Smarter Growth



Piedmont Environmental Council

Surface Transportation Policy Project

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Washington Beltway -- 1968



Washington Beltway -- 2000



Washington Beltway -- 2013



Springfield Interchange (I-95/I-395/I-495) (Complete)


\$800 Million

50 Bridges

Unknown
Maintenance
costs

Simply
moved the
bottlenecks

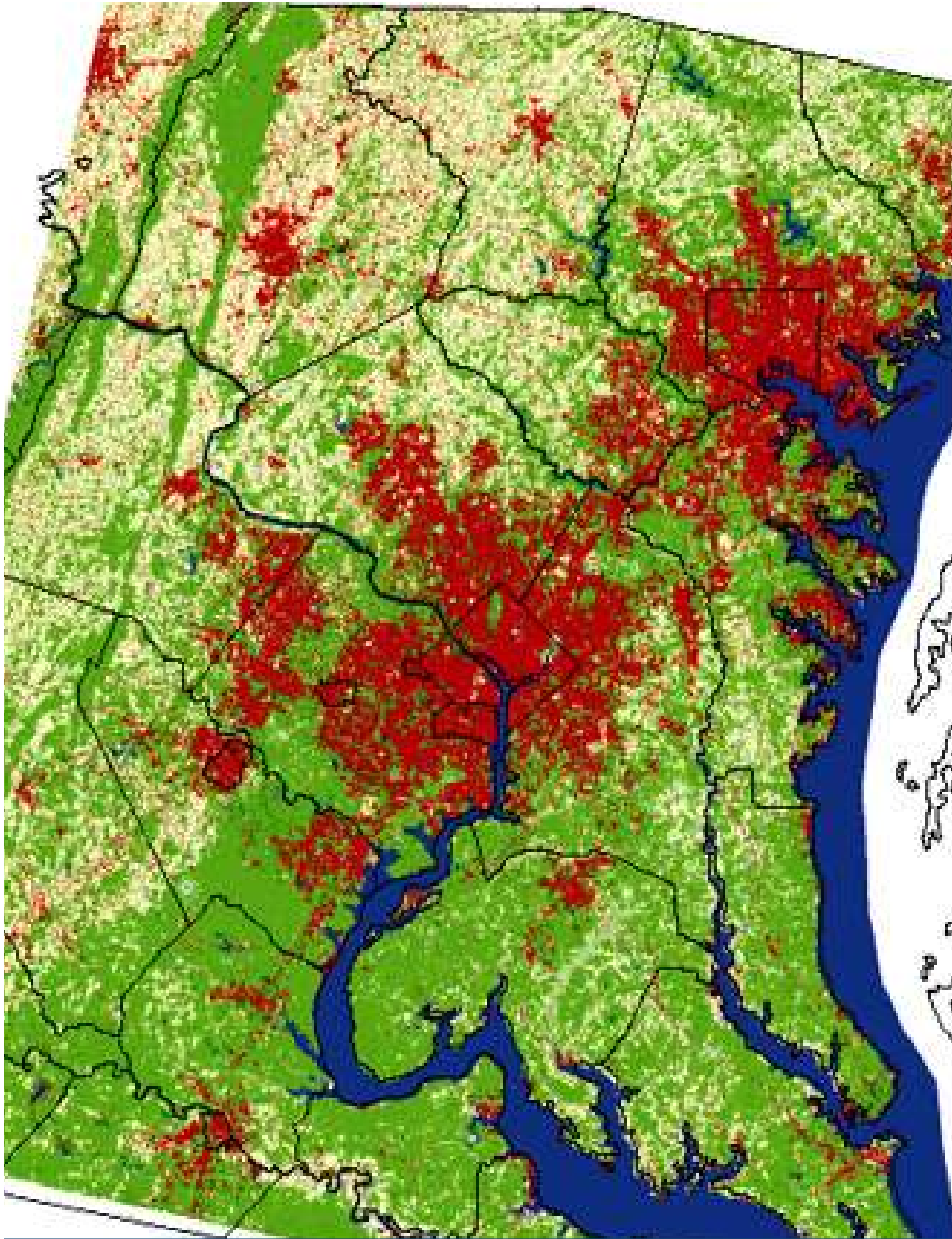




“None of the ICC alternatives will have a substantial impact on the levels of service [congestion] experienced by motorists on the Capital Beltway, I-270 or I-95 within the Study Area.”

***1997 Federal Study on the
Intercounty Connector, Volume 3,***

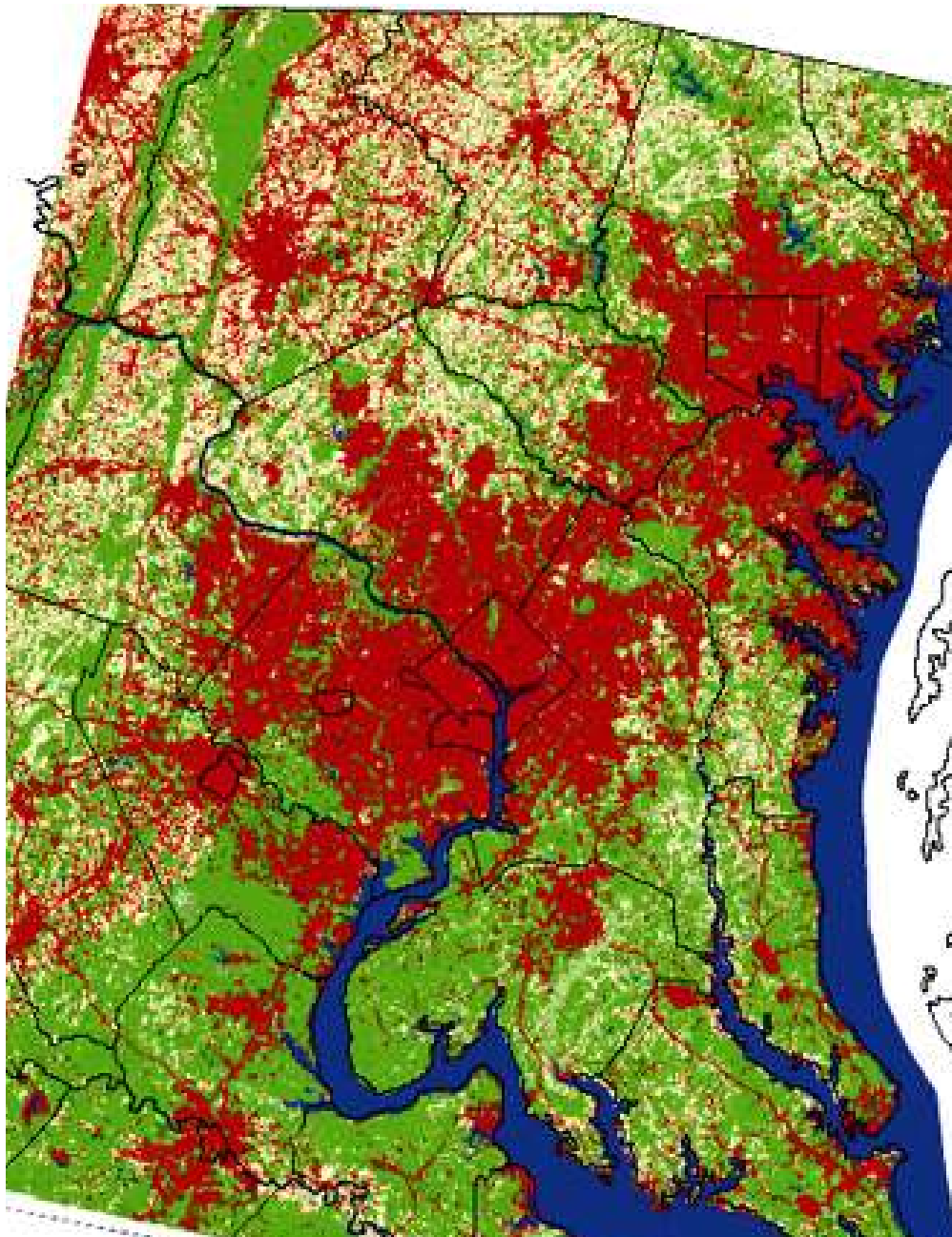
VI-23



Developed Areas in 2000

Developed Land	19%
Farm and Forest	74%

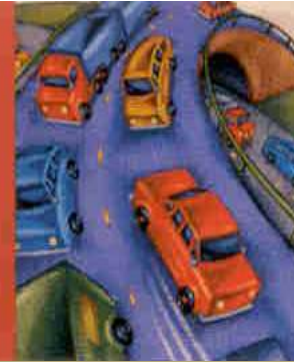
Loss of :
Farmland and Forests
Historic Landscapes,
Watersheds



2030, Under
Trends in the 2000's

800,000 new acres
of Land would be
developed, much of it
in rural areas.

Why so much traffic?



Home



School



Recreation



Store



Work

Where's the "Center" in Centreville?











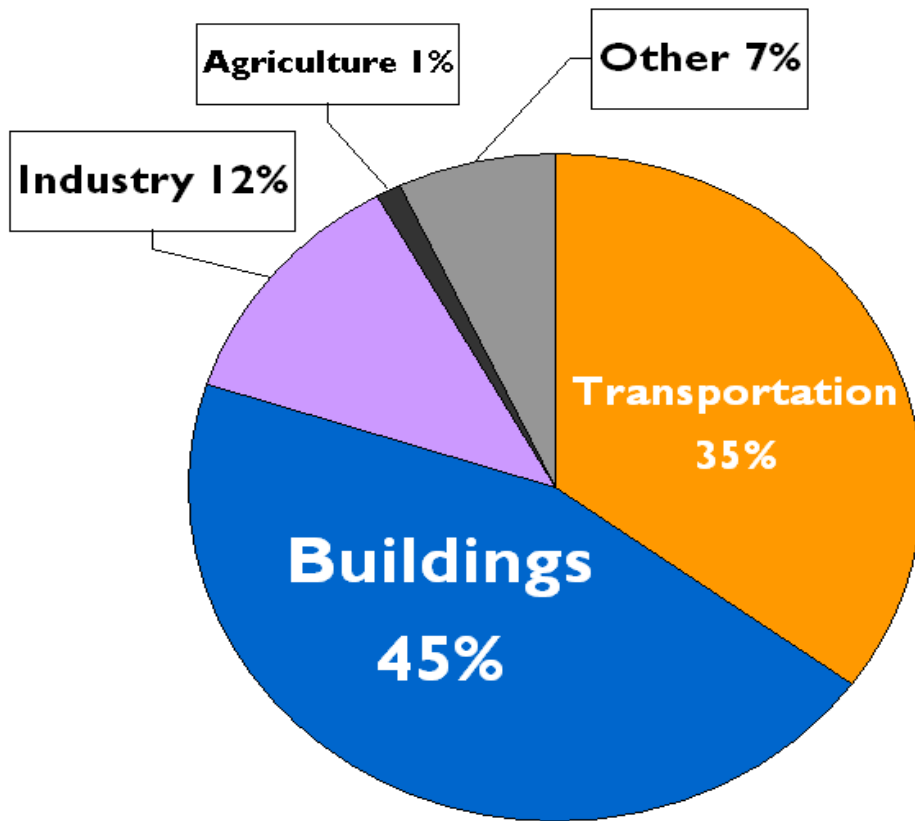
High Cost of Transportation

- AAA: \$8000 per year to own, operate, maintain, and insure a 4-door sedan driven 15,000 miles per year
- CEO's for Cities: "The gas price spike popped the housing bubble."
 - 2002: \$1.10 per gallon
 - 2007: \$4.00 per gallon



U.S. Greenhouse Gas Emissions

Greenhouse Gases by Source



U.S. Oil Dependency

< 5% of World Population

25% of World's Oil

70% for Transportation

Buildings + Transportation = 80% of Greenhouse Gases (& Energy)

Emerging Global Warming Consensus:

U.S. must cut Greenhouse Gases
60-80% below 1990 levels by 2050

- **Transportation about 1/3 of US CO₂ emissions, and growing fastest**
- **Major reductions will be needed in all sectors**
Other sectors (electricity, industry) unable to compensate for transportation

See: *Growing Cooler: The Evidence on Urban Development and Climate Change*, by Ewing, et al.

GROWING COOLER

THE EVIDENCE ON URBAN DEVELOPMENT AND CLIMATE CHANGE



REID EWING
KEITH BARTHOLOMEW
STEVE WINKELMAN
JERRY WALTERS
DON CHEN

Transportation Greenhouse Gases: 3 Legs of a Stool

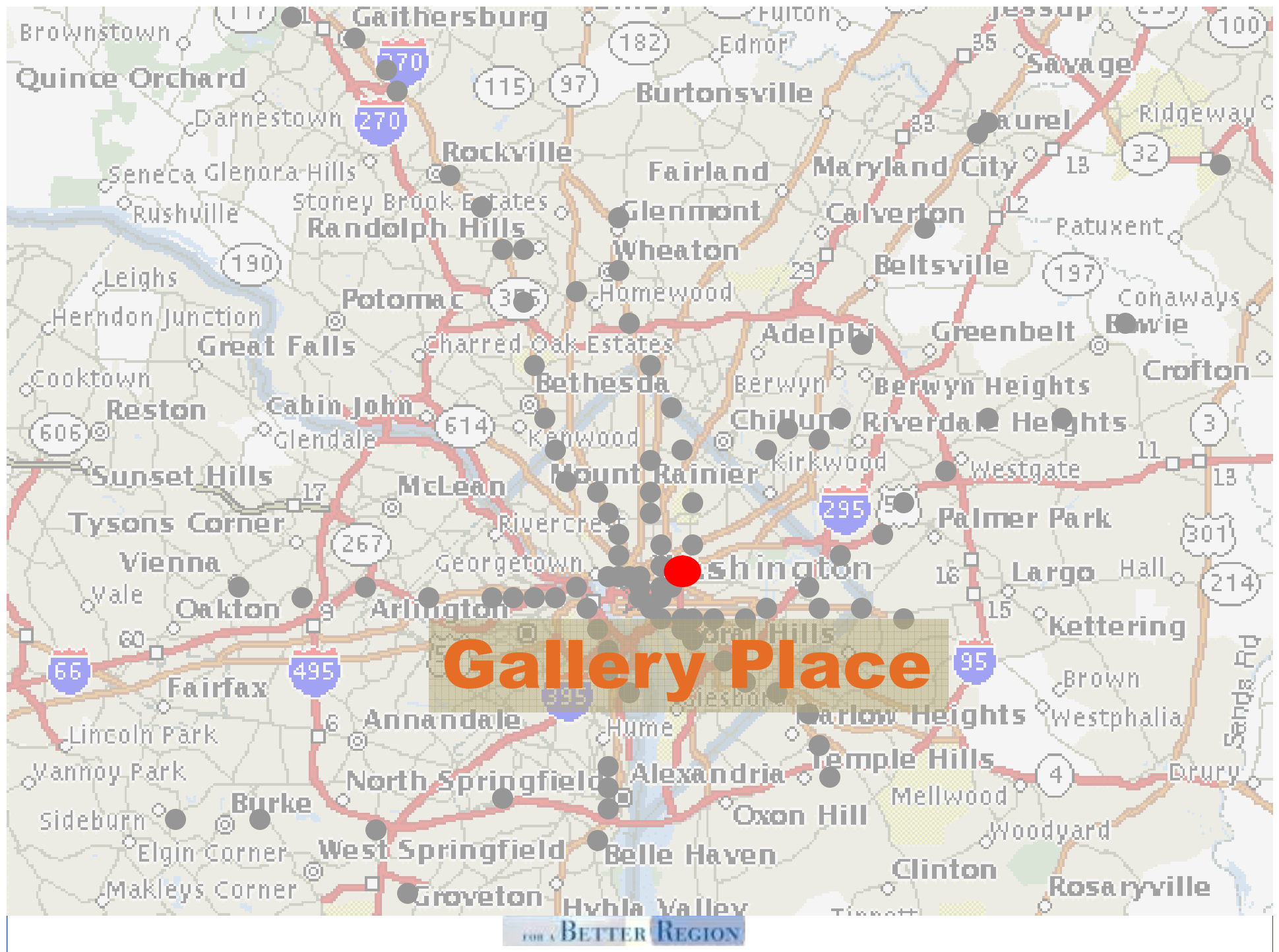
1. Vehicle Efficiency (mpg)
2. Fuel Greenhouse Gas content (Fuel GHG)
3. Vehicle Miles Traveled (VMT)

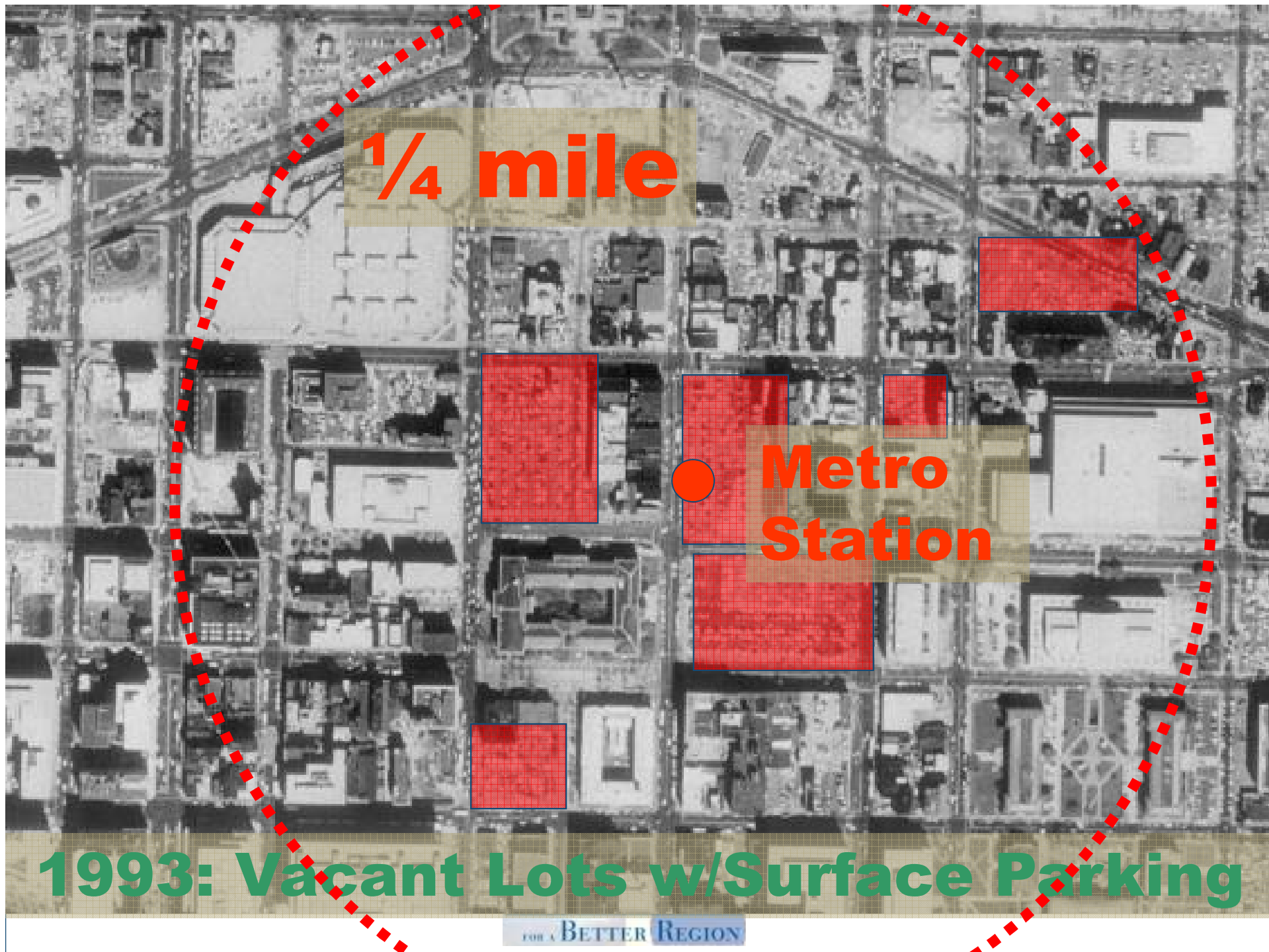
Need progress on all 3 legs, but climate policy discussions have ignored VMT

SOLUTIONS:

Network of Livable Communities (1996)

- Urban revitalization and transit-oriented development with pricing cuts traffic:
 - 15% reduction in daily vehicle trips
 - 11.5% reduction in vehicle miles traveled
 - 22% reduction in vehicle hours of travel
 - 13% increase in average daily highway speed





First Came The MCI Center



FOR A BETTER REGION

Projects Include

**1824 Tariff Building:
Abandoned For Years,
Now a Luxury Hotel**





FOR A BETTER REGION

Washington, DC

Gallery Place Development

Lincoln Memorial

US Capitol

1300 acres

Town of Herndon



Arlington County, Virginia

- Use Metrorail as catalyst for redevelopment of commercial spine of Arlington
- Concentrate density and promote mixed use at five stations; scale development down to neighborhoods
- Preserve and reinvest in adjacent residential neighborhoods



5 Metro Stations

Rosslyn

Courthouse

Clarendon

Va Square

Ballston

Undisturbed

Undisturbed

Undisturbed

Undisturbed

ROSSLYN THEN



ROSSLYN NOW







Ballston

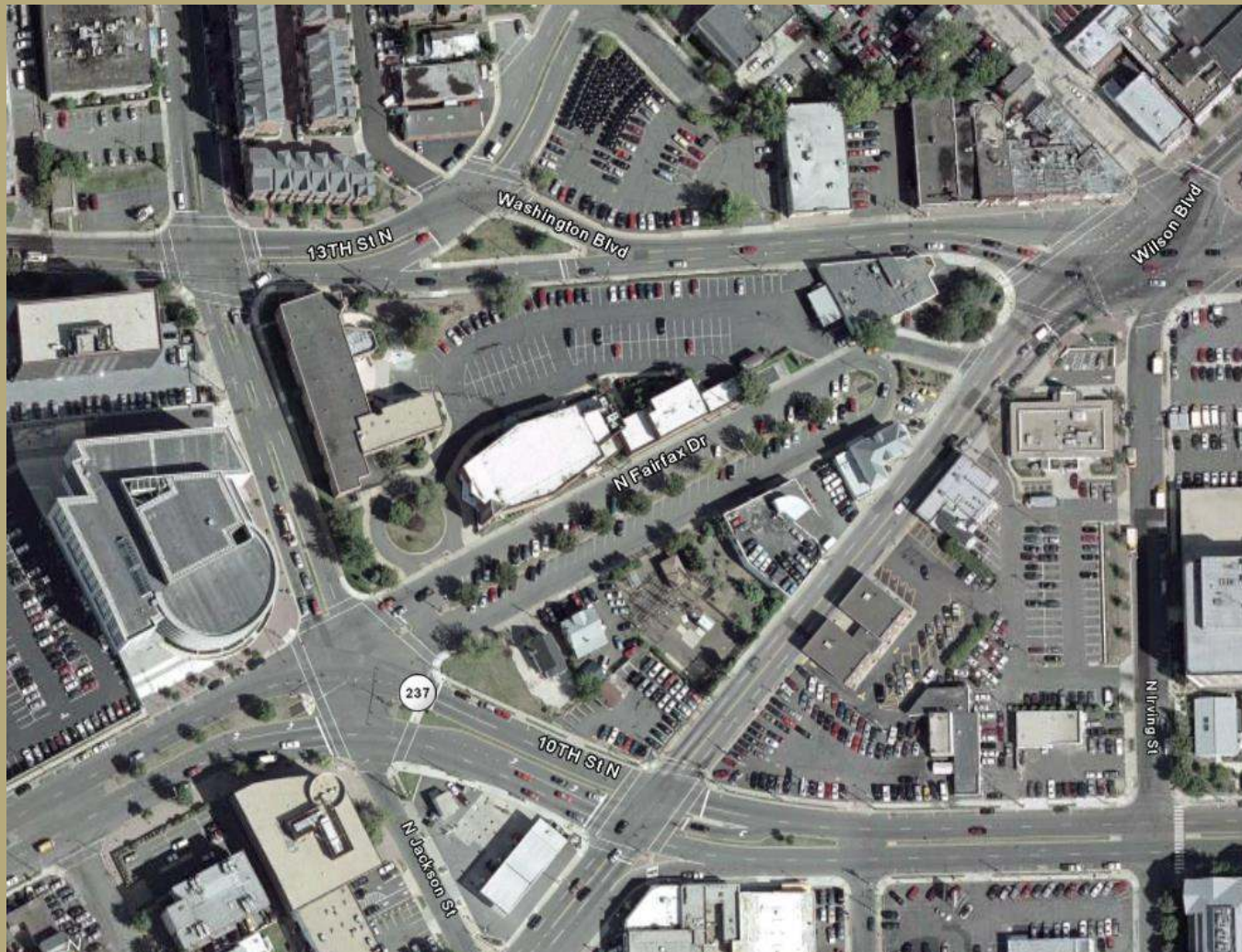
3 blocks from Ballston Metro



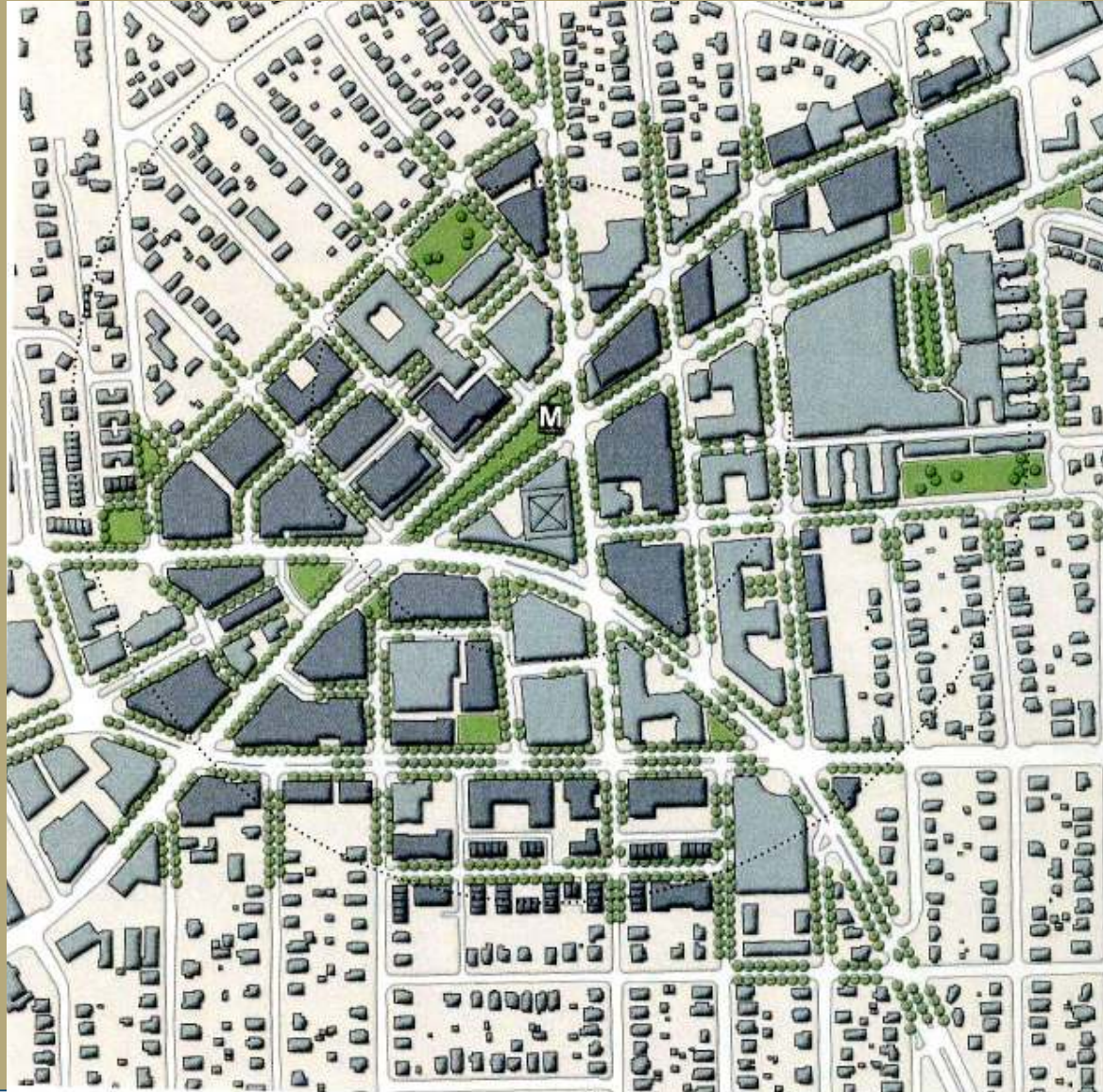
Clarendon 1980's



Clarendon 2000's



Clarendon Future



Clarendon Future (oblique view)





Redevelopment Results

R-B CORRIDOR 1970



22,000 jobs

5.5 million sf office

7,000 housing units

R-B CORRIDOR TODAY



94,000 jobs

23.5 million sf office

24,500 housing units

**More Downtown office space
than Dallas, Denver, Pittsburgh**

ECONOMIC/FISCAL RESULTS

- Two TOD Corridors = 11% of land area and 50% of property taxes
- Lowest Property Tax Rate in DC Region with High Level of Services
- TOD corridor revenues fund parks, libraries, schools, streets, recreation centers, and other services in ALL Arlington neighborhoods

Redvelopment and Infill

\$ 15,956

\$ 28,042

Downtown/Urban



Linear/Suburban



Restoring Streams and Creeks



Scenario A

1 house/acre



Impervious cover =
20 percent

Total runoff ($18,700 \text{ ft}^3/\text{yr} \times$
8 acres) = $149,600 \text{ ft}^3/\text{yr}$

Runoff/house =
 $18,700 \text{ ft}^3/\text{yr}$

Scenario B

4 houses/acre



Impervious cover =
38 percent

Total runoff ($24,800 \text{ ft}^3/\text{yr} \times 2 \text{ acres}$) = $49,600 \text{ ft}^3/\text{yr}$

Runoff/house =
 $6,200 \text{ ft}^3/\text{yr}$

Scenario C

8 houses/acre



Impervious cover =
65 percent

Total runoff = $39,600 \text{ ft}^3/\text{yr}$

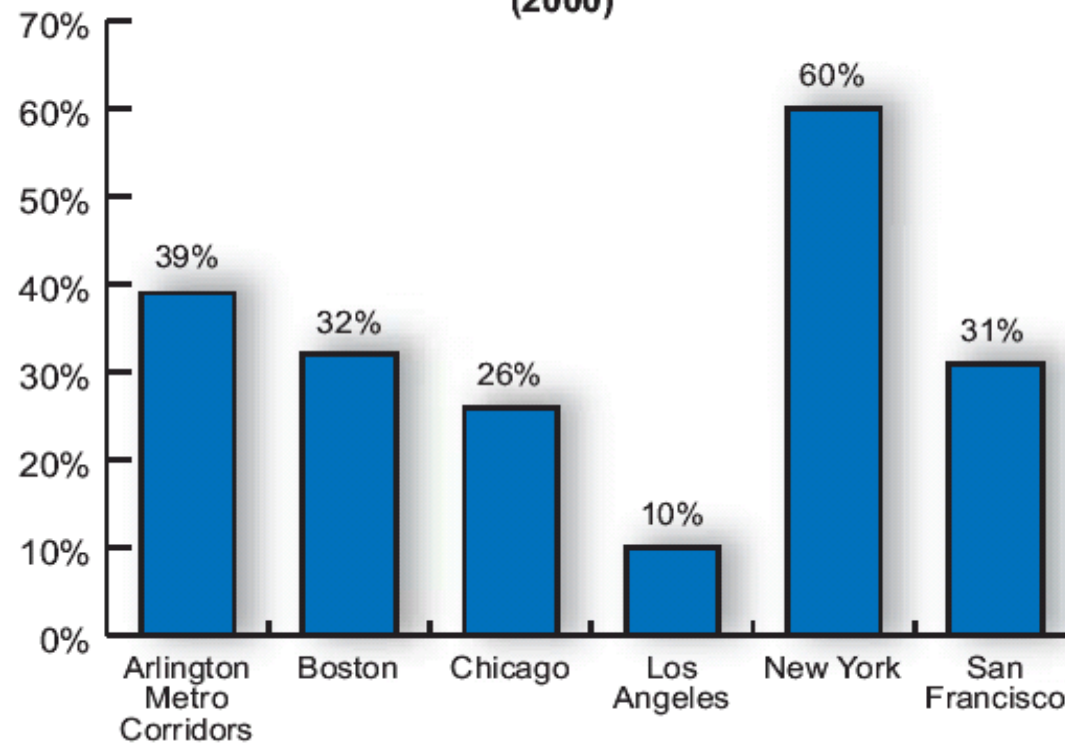
Runoff/house =
 $4,950 \text{ ft}^3/\text{yr}$

Creating Environments Rich In Travel Choices



Transit usage

**Figure 1. Workers Commuting by Public Transportation
(2000)**

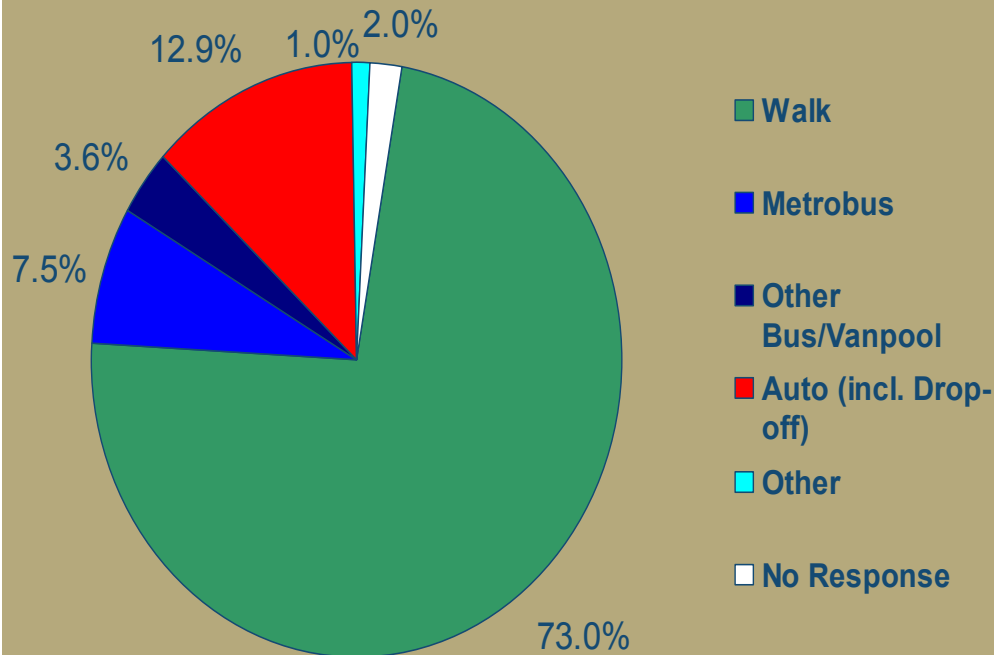


Source: U.S. Census Bureau

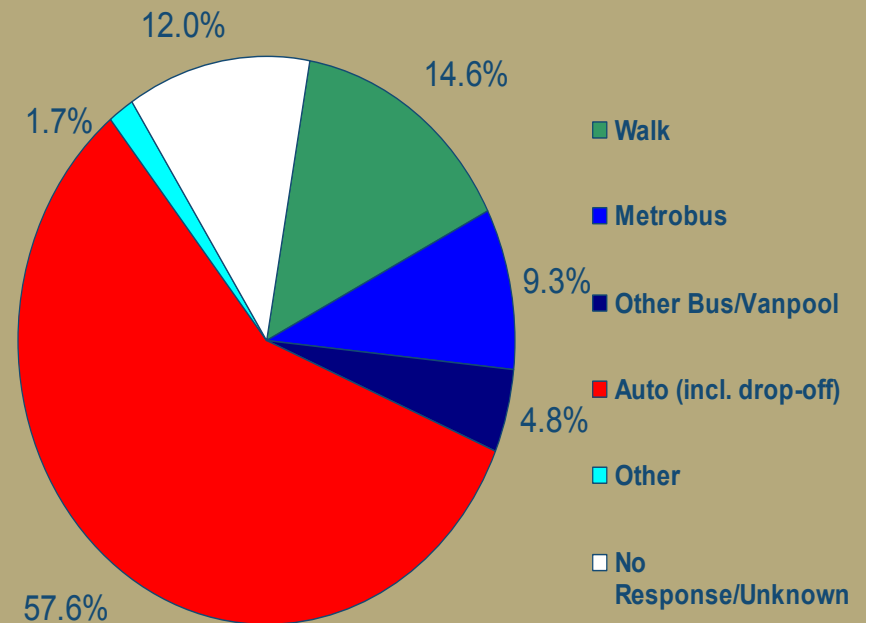
Walk/Bike vs. Drive to Metro

R-B Corridor vs. EFC to Vienna

5 R-B Corridor Stations – 45,733
Weekday Boardings



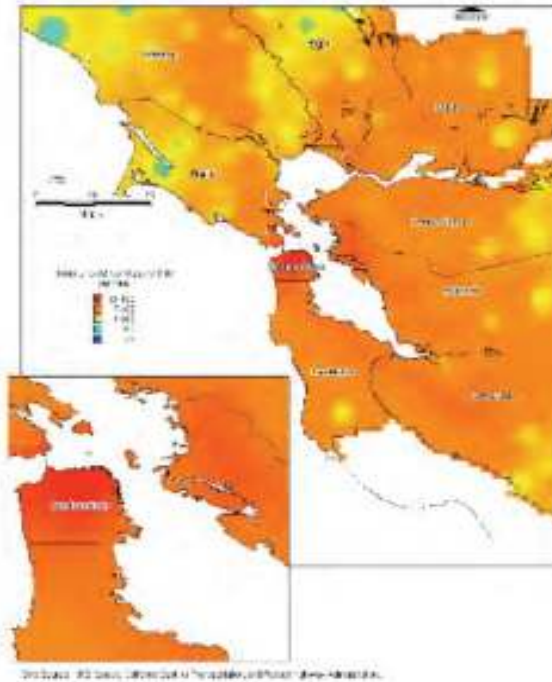
4 Suburban Stations – 34,451
Weekday Boardings



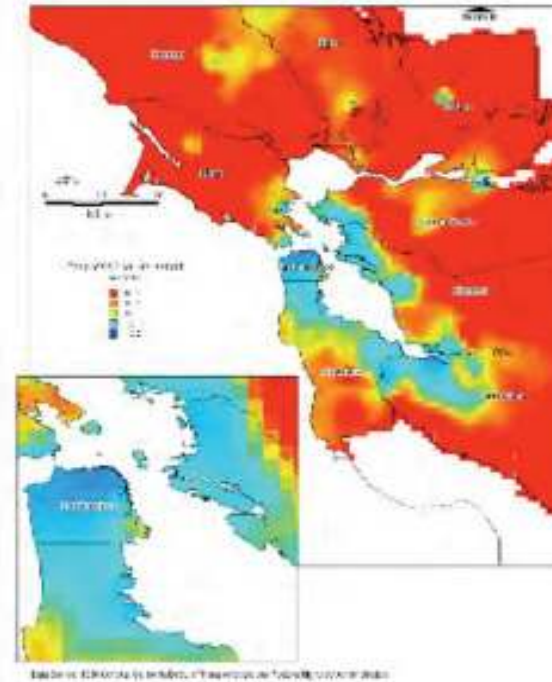
Two Views of Cities and CO₂

CO₂ Generated by Automobiles in the San Francisco Region per Year

Traditional View:
Cities produce large amounts of GHGs.

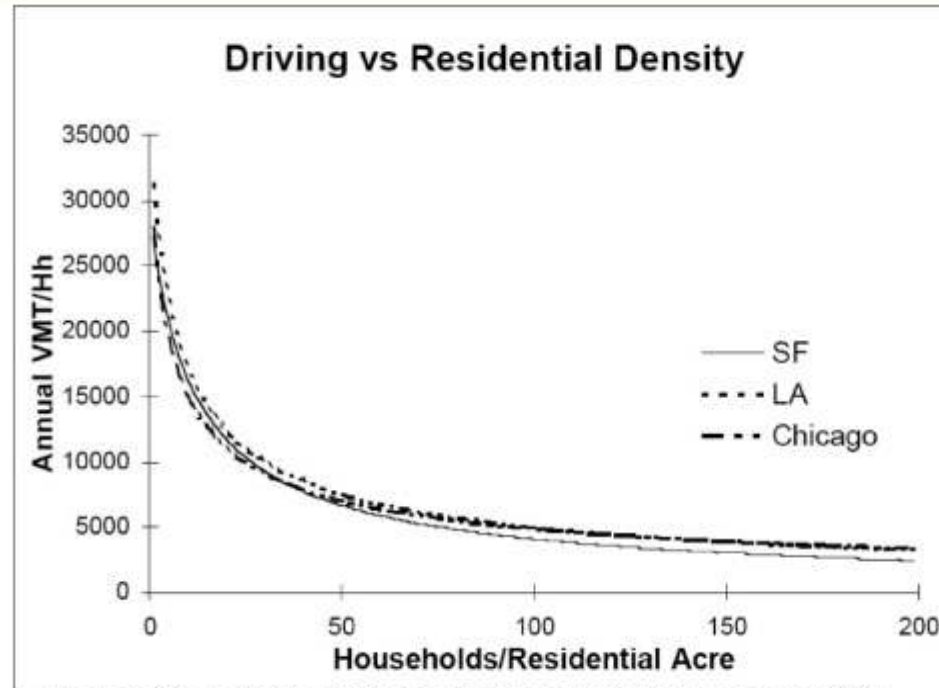


Emerging View:
City dwellers produce relatively low amounts of GHGs.



Each color represents one fifth of the land area on each map.

VMT & Residential Density



Holtzclaw, Clear, Dittmar, *Transportation Planning and Technology*, 2001.
(www.reconnectingamerica.org)

Cool Communities

Identifying Climate-Friendly Developments
in the Washington D.C. Region



Executive Summary

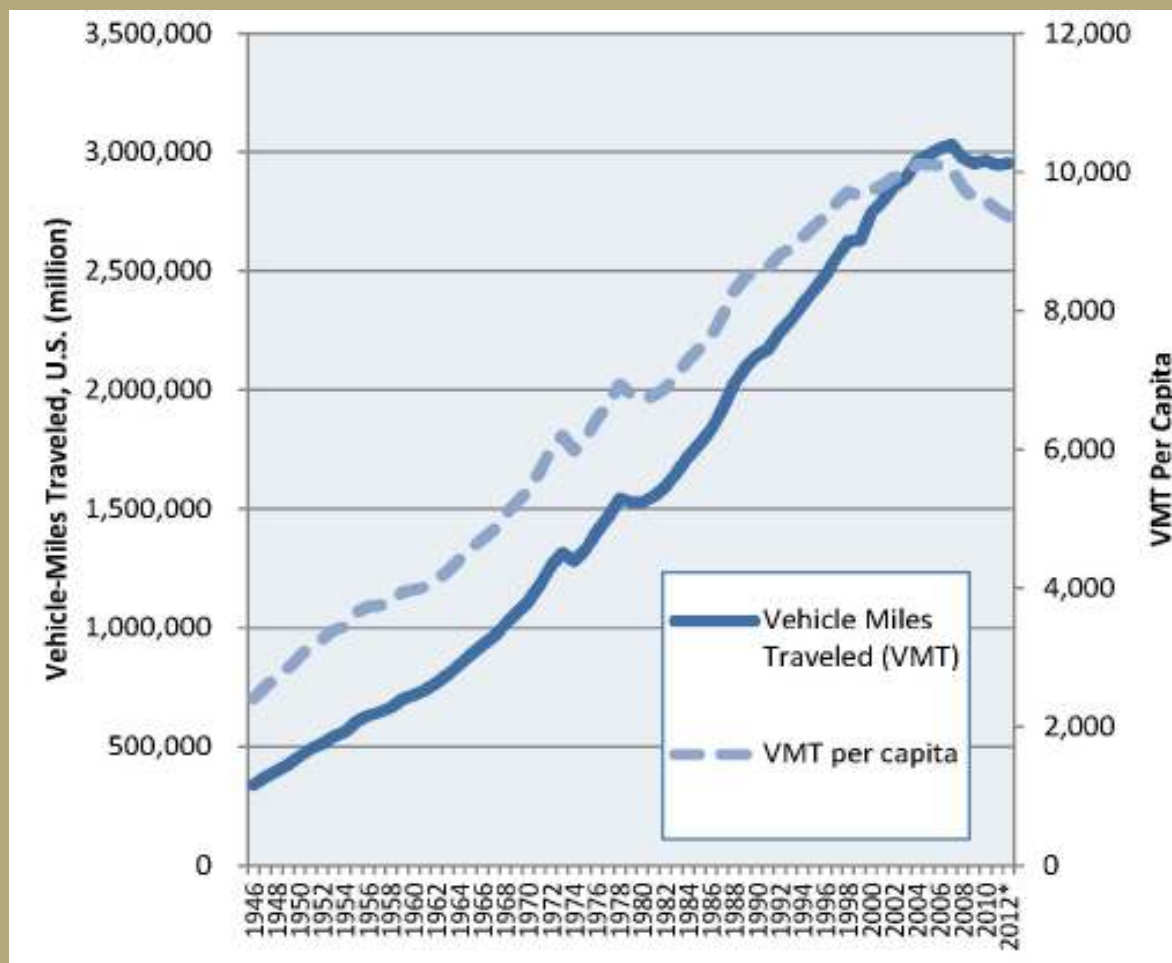
April 12, 2010

A Coalition for Smarter Growth research report

www.smartergrowth.net



U.S. PIRG Education Fund: A New Direction: Our Changing Relationship with Driving and the Implications for America's Future



U.S. Department of Transportation's (U.S. DOT) Traffic Volume Trends series of reports; data from previous years from U.S. DOT's Highway Statistics series of reports.





Reinventing the Commercial Strip

Great Places Begin with Great Streets



Streets

Ample sidewalks for cafes







Fairfax - Route 1

For Their Future



And Our Own!



For More Information



Capitol Heights Metro

Stewart Schwartz, Executive Director
Coalition for Smarter Growth

www.smartergrowth.net

Email: stewart@smartergrowth.net



U Street Metro