



GreenDividend

Cities facilitate less driving, saving money and stimulating the local economy

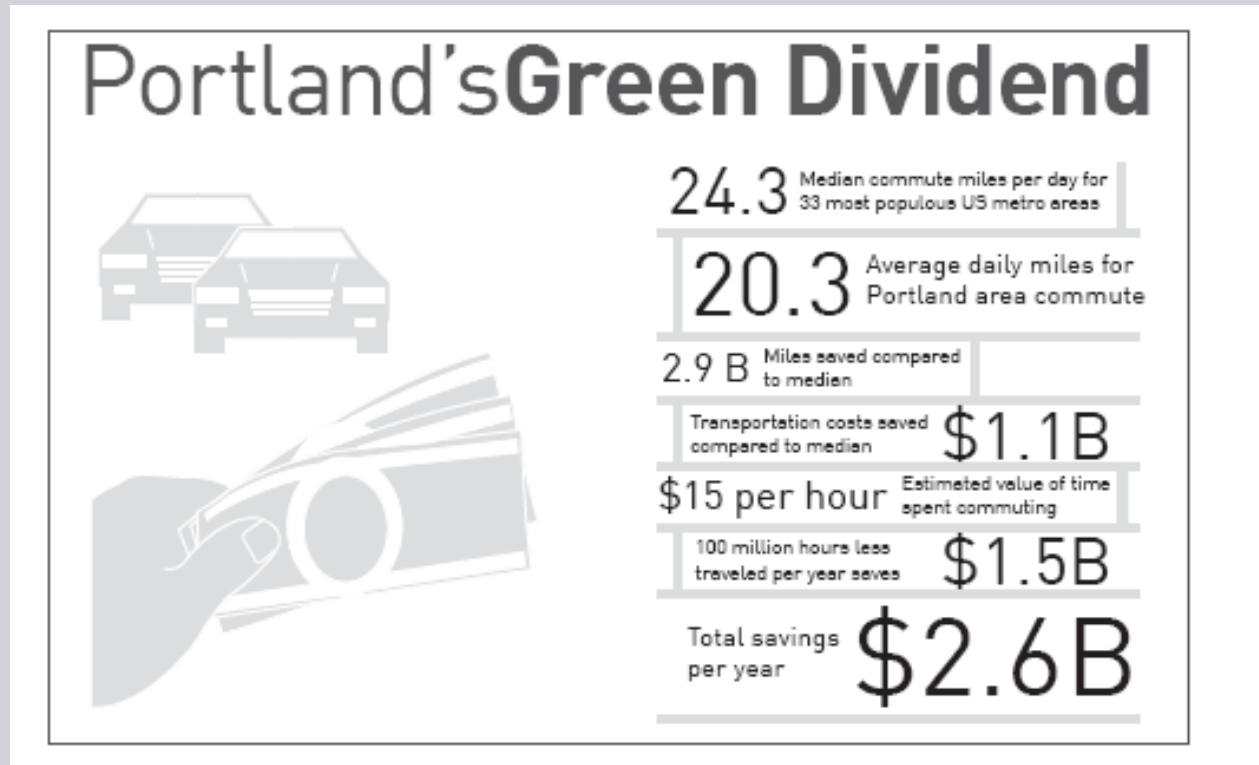
Joseph Cortright, Impresa
September 2007

Synopsis

- What is the Green Dividend?
- Portland as a Case Study
- Tampa Bay's Potential Green Dividend

Green Dividend

How urban form and transit enable people to drive less, saving money that gets spent locally, helping foster urban economic growth



Does being green pay?

- Is conservation just noble self-sacrifice; well-intentioned but un-economic?
- Or does it make a difference to the local economy?

Portland

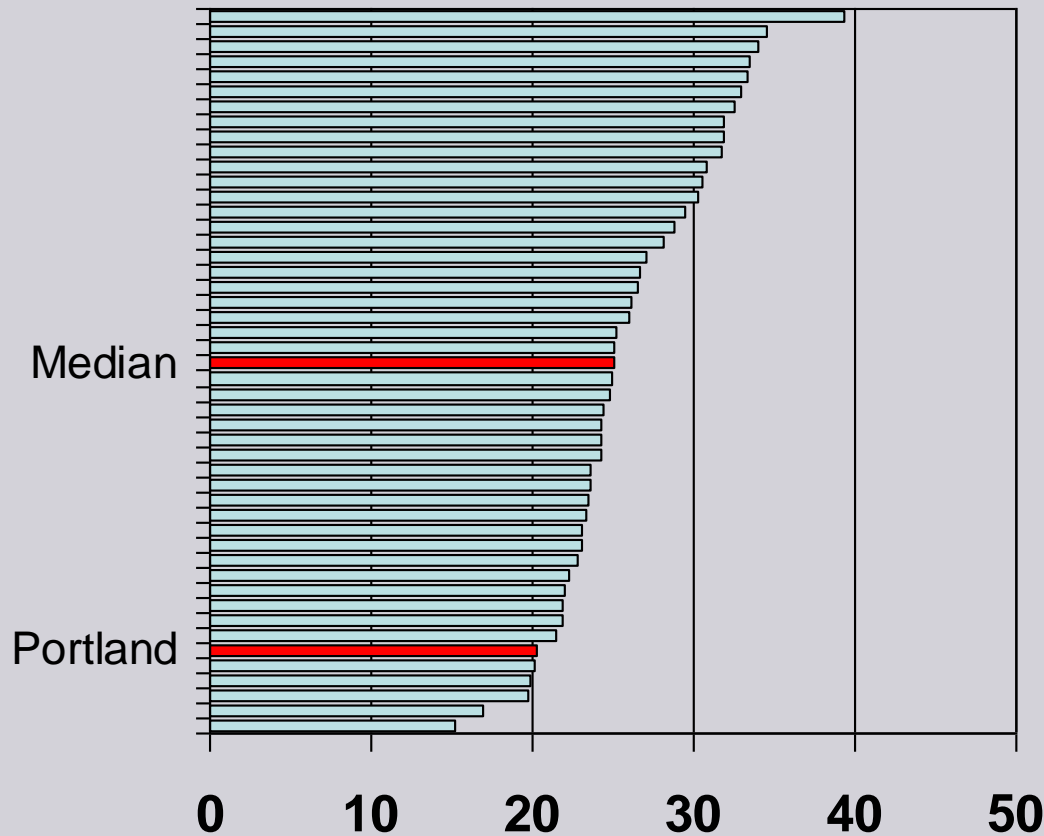


Green Portland

- One of the nation's greenest cities
- City policy to limit greenhouse gases
- Land use and transportation policies
 - Higher density
 - Transportation alternatives
 - Housing choices

Key Measure: Vehicle Miles Traveled

Metropolitan VMT Per Capita, Per Day



Monetary Savings

Annual savings to Portland area:

4.0 fewer miles x

365 days x

2.0 million metro population x

\$ 0.40/mile

= \$1.1 billion annual income savings

Time Savings

- Travel 2.8 billion fewer person miles per year
- (2.2 million people * 365 days * 4 miles)
- Value of travel time estimated at \$15/hour
- Savings in travel time
 - 100 million hours (at 27 miles per hour)
 - Value of time saved: \$1.5 billion

Corroborating Evidence

- Consumer Spending
- Vehicle Purchases
- Gasoline Sales

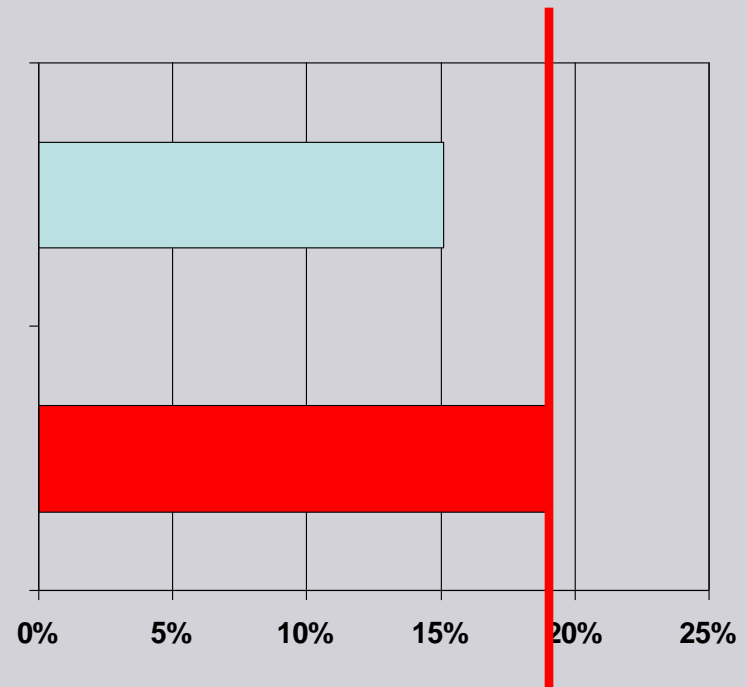
Portland spends less on transportation

Portland

15.1% of consumer expenditures

Average of 26 Largest Metro Areas

19.1% of consumer expenditures

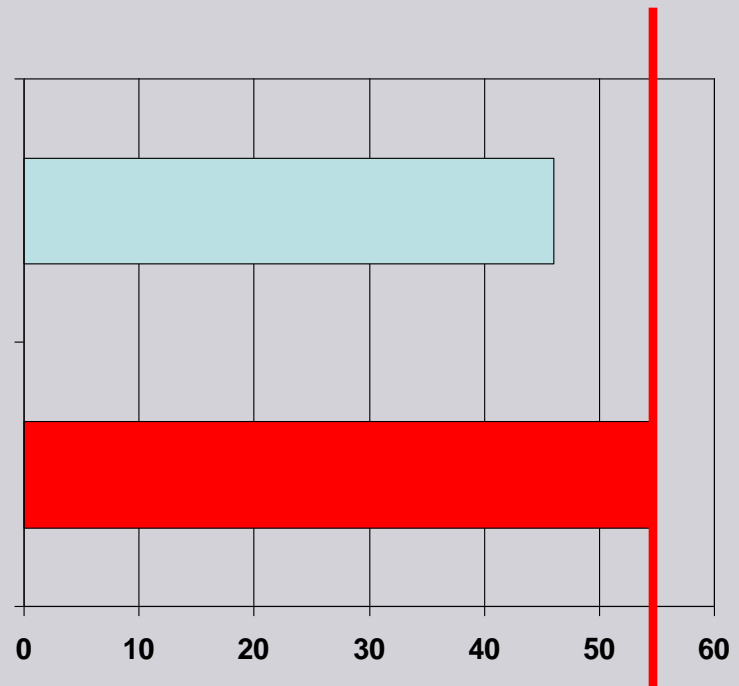


(Source: Impresa analysis of Department of Labor data)

Portland residents buy fewer new cars

Oregon
46 Vehicles per 1,000 Population

United States
55 Vehicles per 1,000 population



(Source: Impresa analysis of National Automobile Dealers Association data)

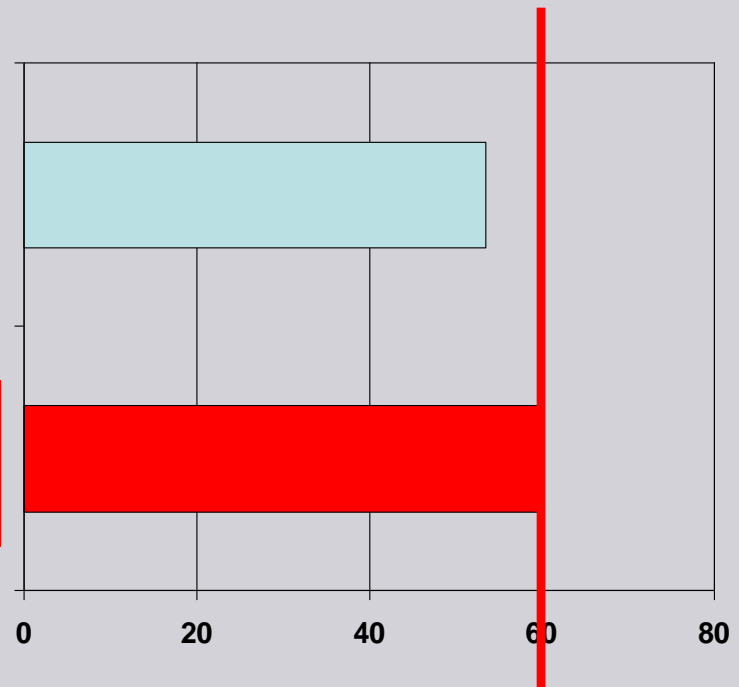
Portland residents buy less gasoline

Oregon

53.5 million BTU per capita

United States

59.6 million BTU per capita



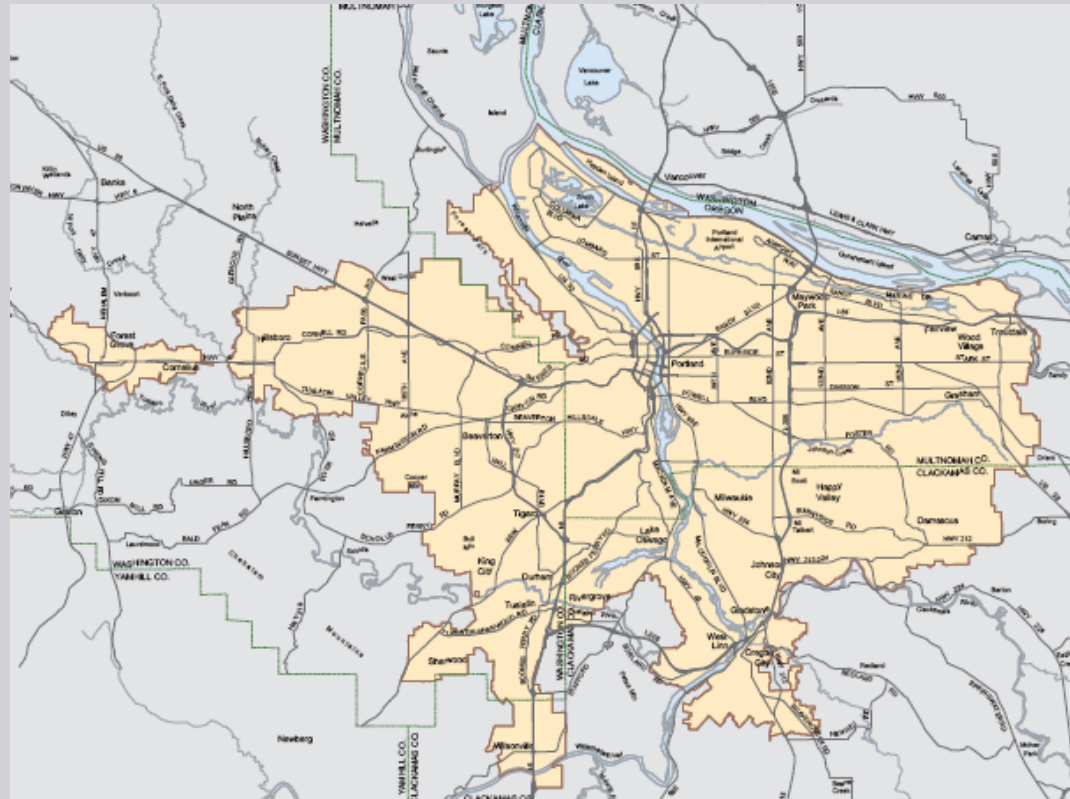
(Source: Impresa analysis of Energy Information Administration data)

How Portland does it

- More Compact Development
 - Urban Growth Boundary
 - Less Sprawl
- Alternatives to Auto Travel
 - Transit
 - Bicycling
- Personal Choices

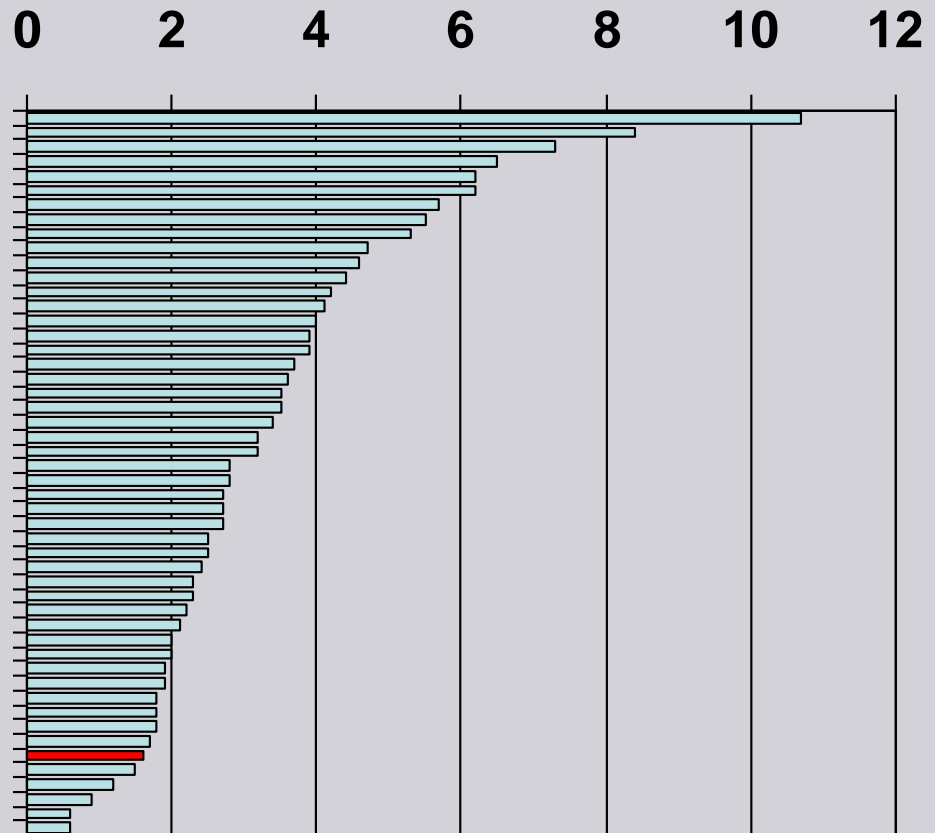
Compact Land Use

- Portland's Urban Growth Boundary
- Limits on exclusionary zoning



Portland's jobs sprawl less

Job Sprawl Index, 2004



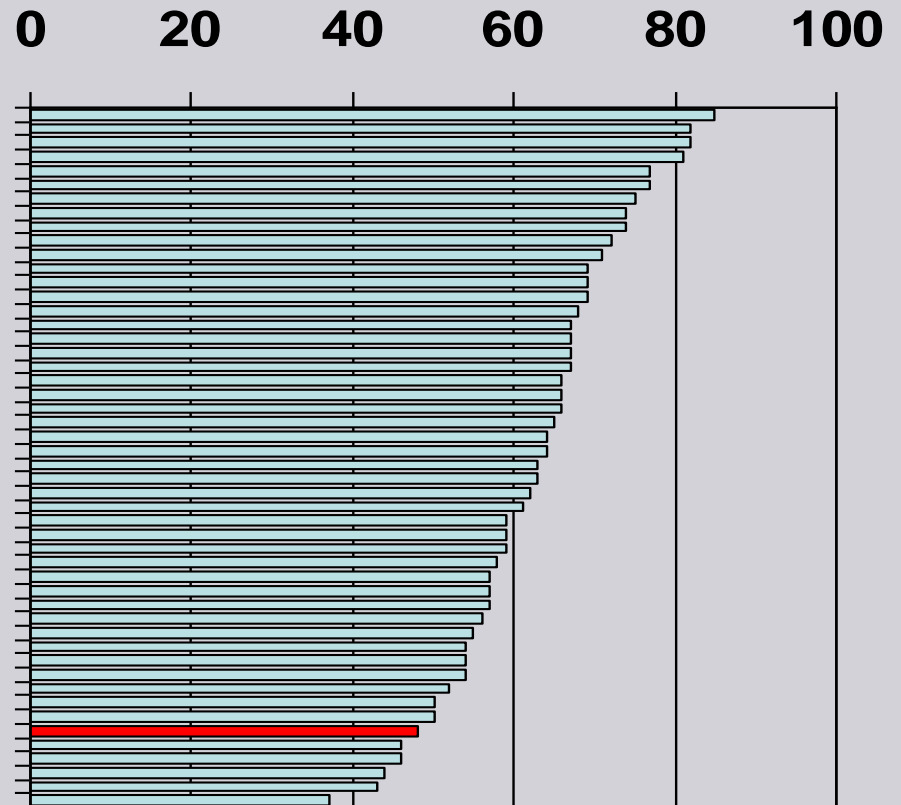
Job Sprawl Index:
Ratio of Jobs 10 to 25 miles
From CBD to
Jobs less than 3 miles from CBD

Portland--Salem, OR--WA CM

Less Economic Segregation

Economic Segregation Index:

Percent of High income households that would have to move to balance high and low income households to regional average in each neighborhood)



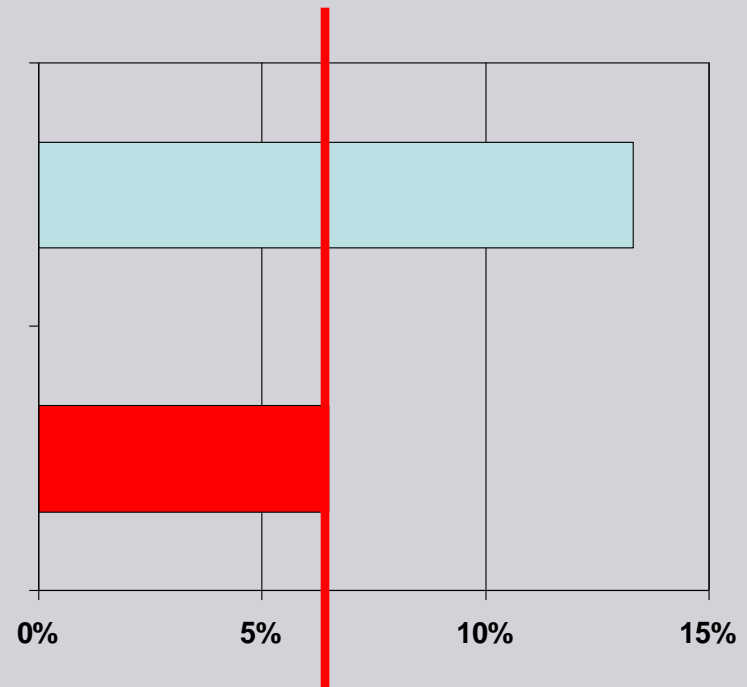
Portland-Vancouver, OR-WA PMSA

Source: Lewis Mumford Institute)

Portland residents ride transit more

Portland
13.3% Commute by Transit

United States
6.5% Commute by Transit



(Source: American Community Survey, 2005)

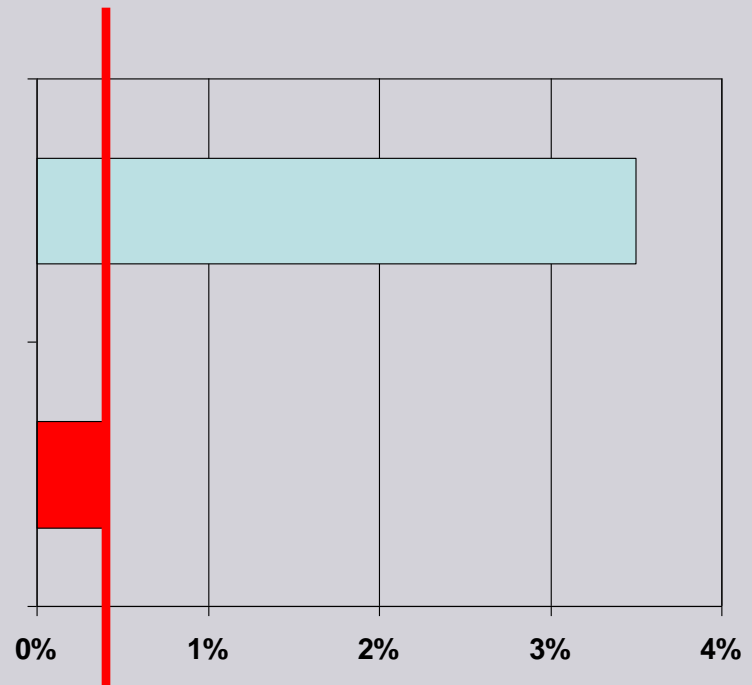
Portland residents seven times as likely to bicycle to work

Portland

3.5% of commuters bicycle to work

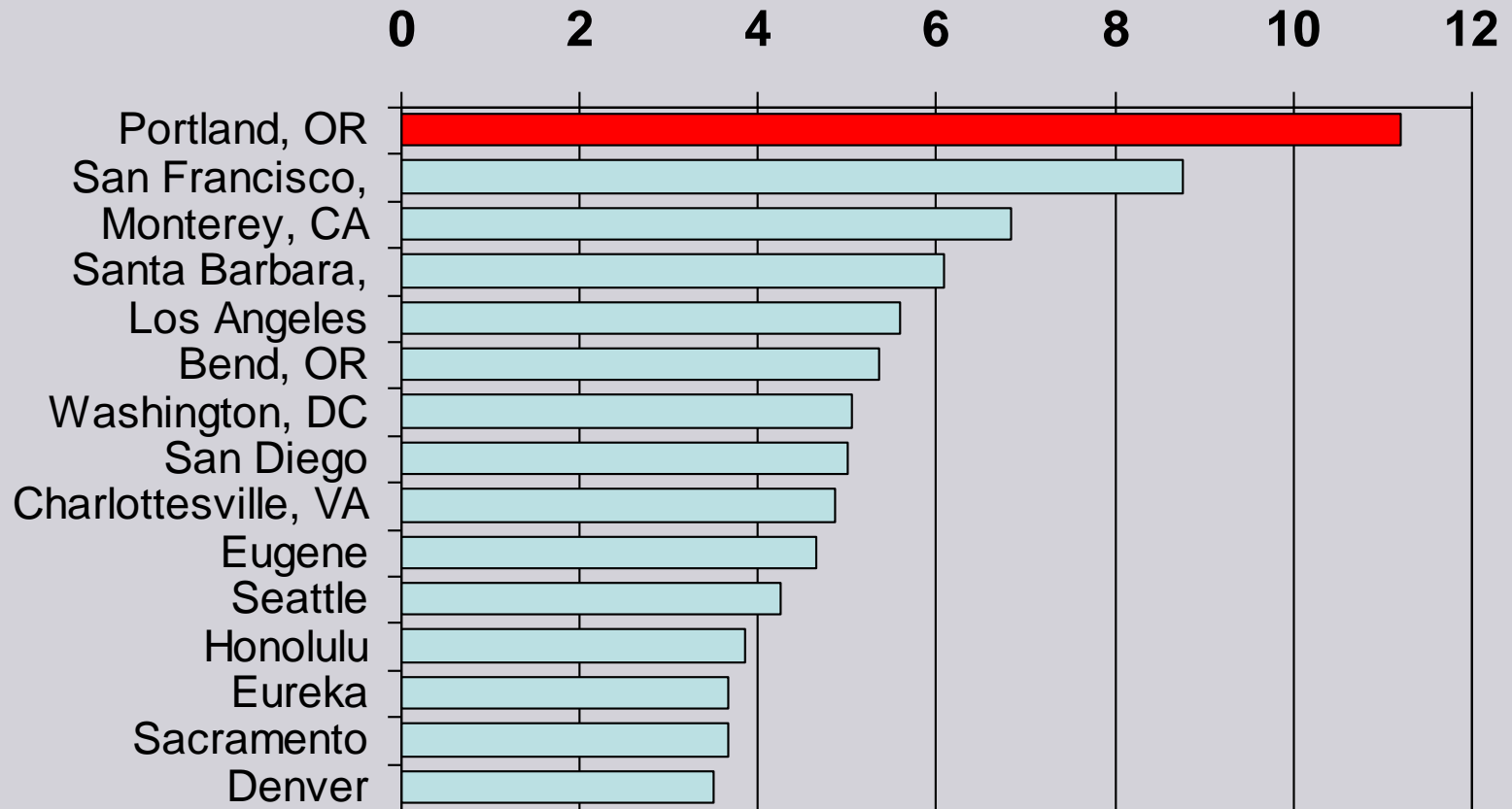
Average for Cities of 85,000 plus

0.4% of commuters bicycle to work



Most Hybrids Per Capita

Hybrids per 1,000 Households, 2006



Source: <http://www.hybridcars.com/market-dashboard/feb07-regional.html>

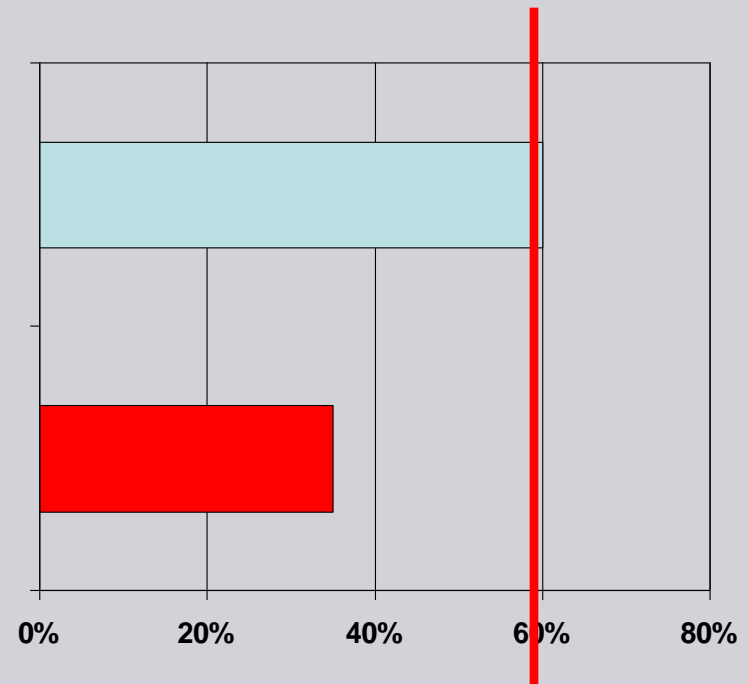
Happier Citizen Commuters

Portland

60% rate transportation system “good or excellent”

Average of Metro Areas

35% rate transportation system “good or excellent”



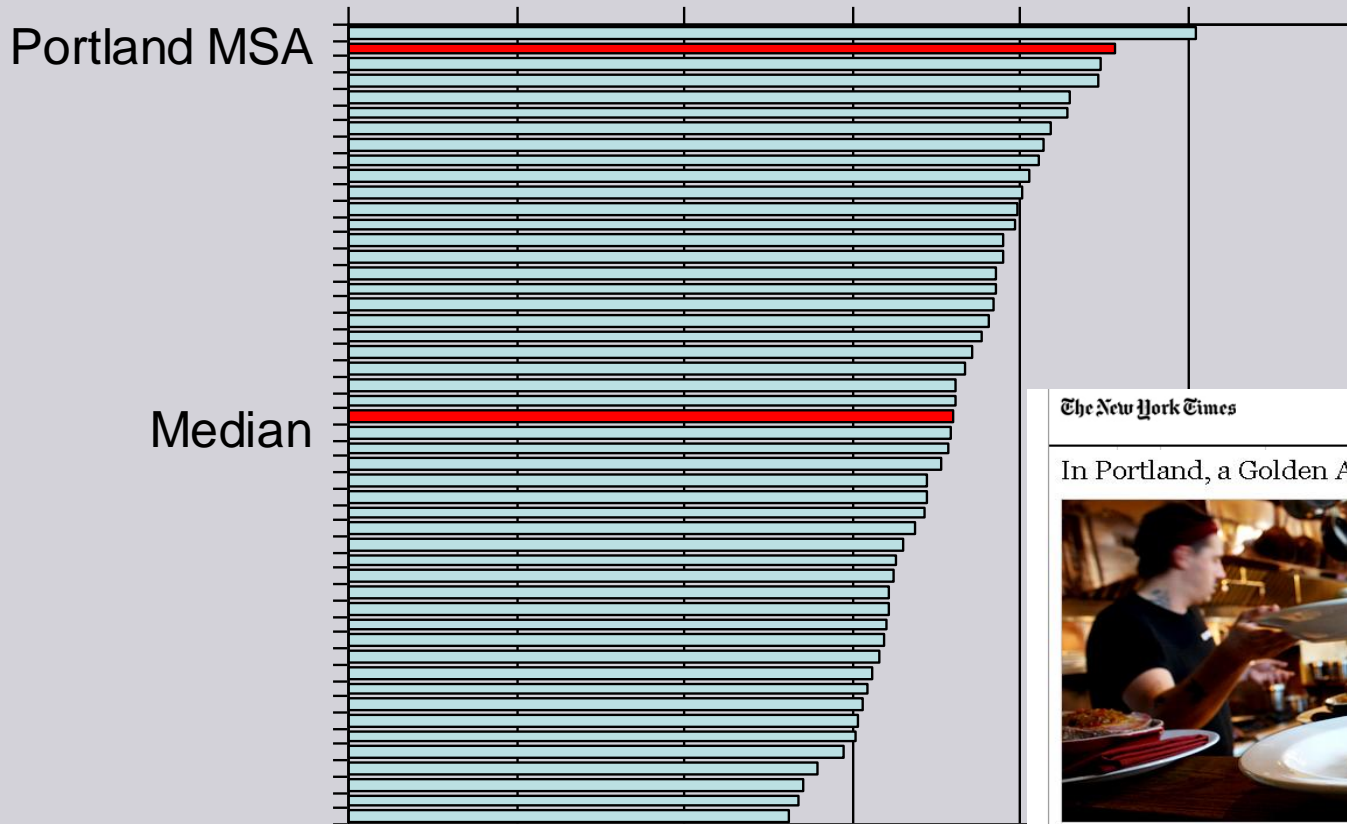
More Local Spending

- Spending on cars and fuel leaves the regional economy
- Other spending has less leakage
- \$1 billion in additional local purchasing power for all other industries

More Restaurants

Restaurants per 10,000 population

0 2 4 6 8 10 12



The New York Times

Dining & Wine

In Portland, a Golden Age of Dining and Drinking



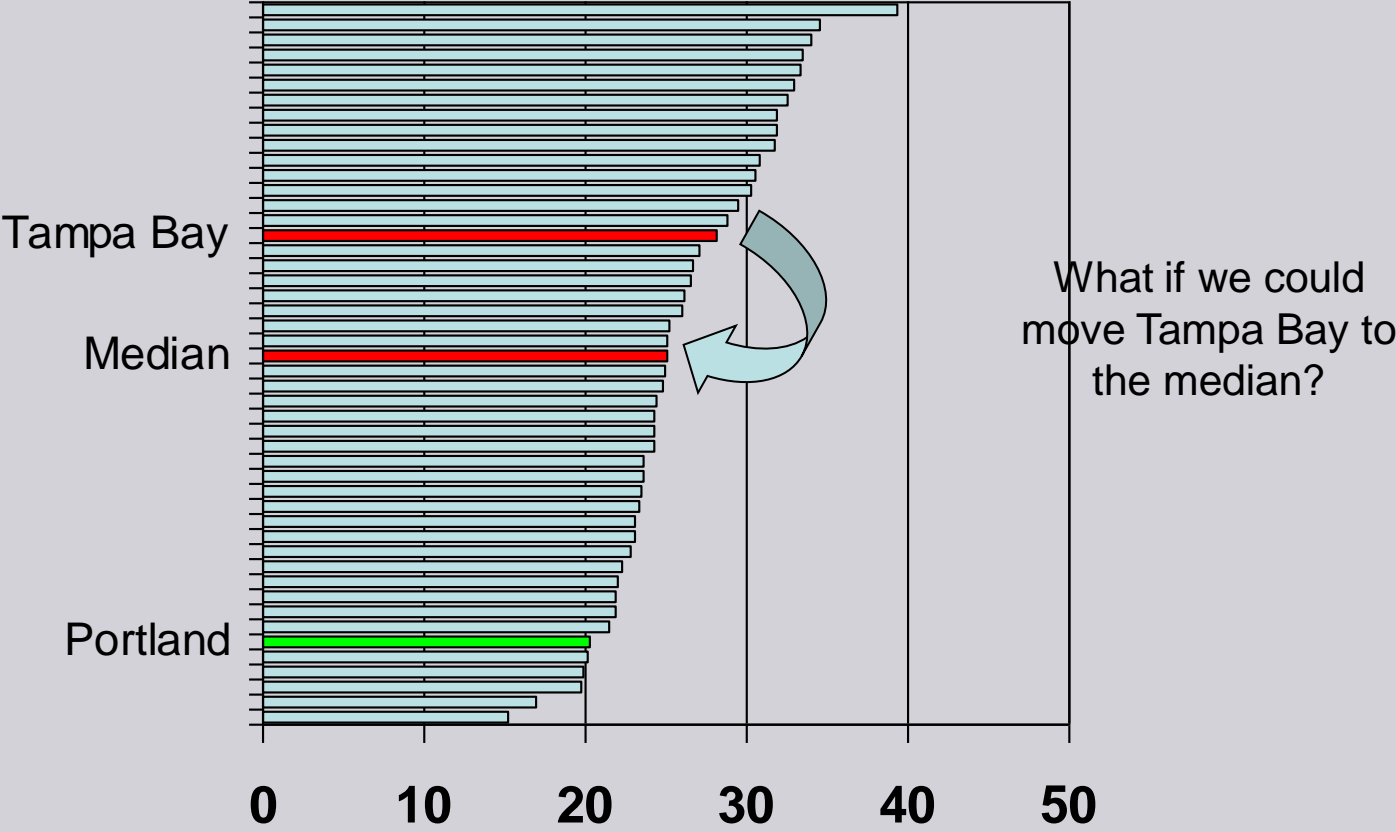
Michael Rubenstein for The New York Times

And, yes, Lower Carbon Emissions

- 2 million people drive 4 miles less per day, yielding 8 million fewer miles per day
- At 20 miles per gallon, that saves 400,000 gallons of gas
- At 19.4 pounds of CO² emitted per gallon, 365 days a year
- that saves 1.4 million tons per year

What about Tampa Bay?

Metropolitan VMT Per Capita, Per Day



What if we could move Tampa Bay to the median?

Source: U.S. Department of Transportation

Tampa Bay's *Potential* Green Dividend

Annual savings to Tampa Bay:

3.6 fewer miles x

365 days x

3.4 million metro population x

\$ 0.40/mile

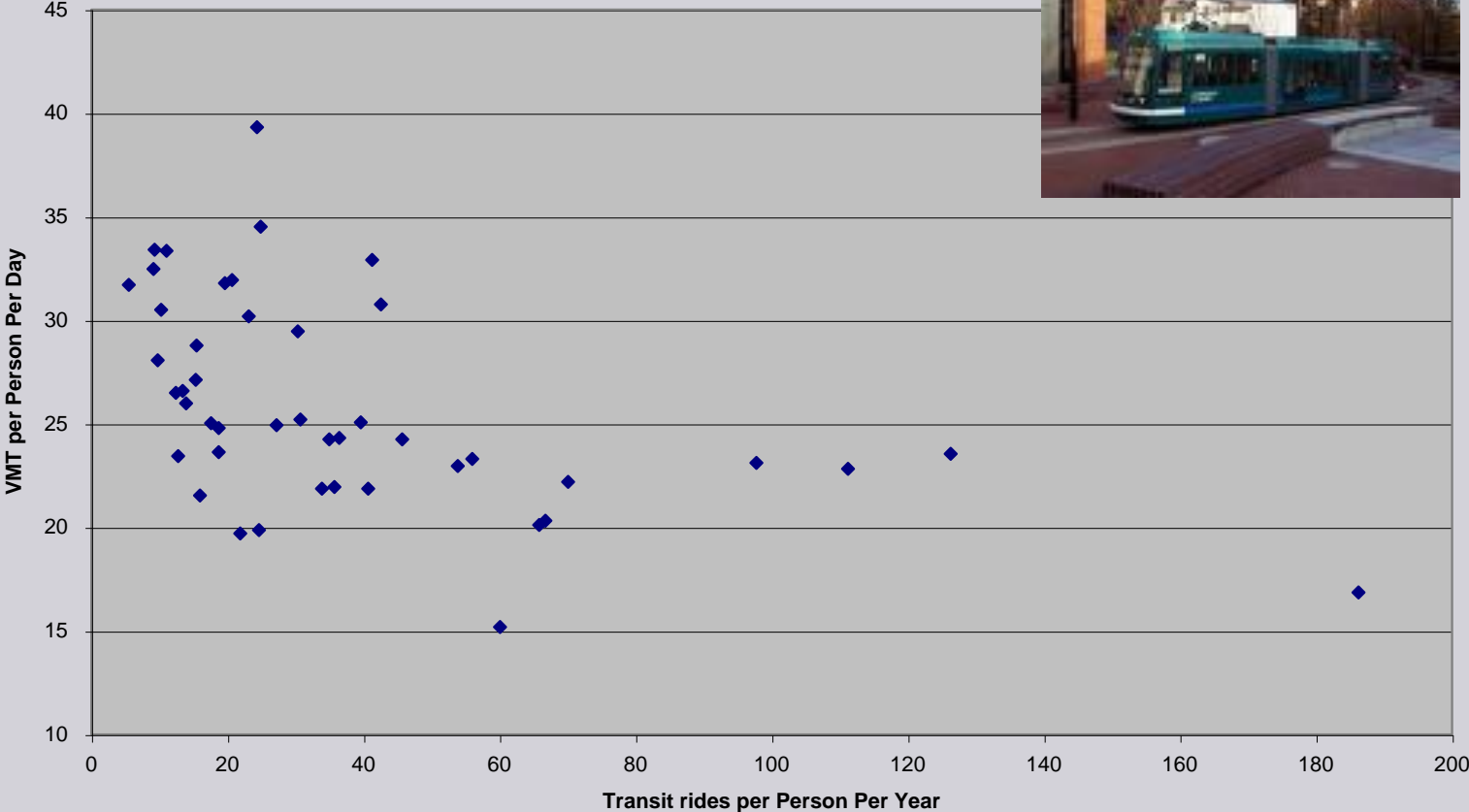
= \$1.8 billion annual savings

How to earn the Green Dividend

- Transit
- Urban Retrofitting
 - Commercial Redevelopment
 - Mixed Use In-Fill
- Personal Choice

Transit is a key

Transit Reduces Vehicle Miles Travelled
Cities with well-used transit systems drive less



Source: Calculations from Census Bureau and Department of Transportation data

Commercial Redevelopment

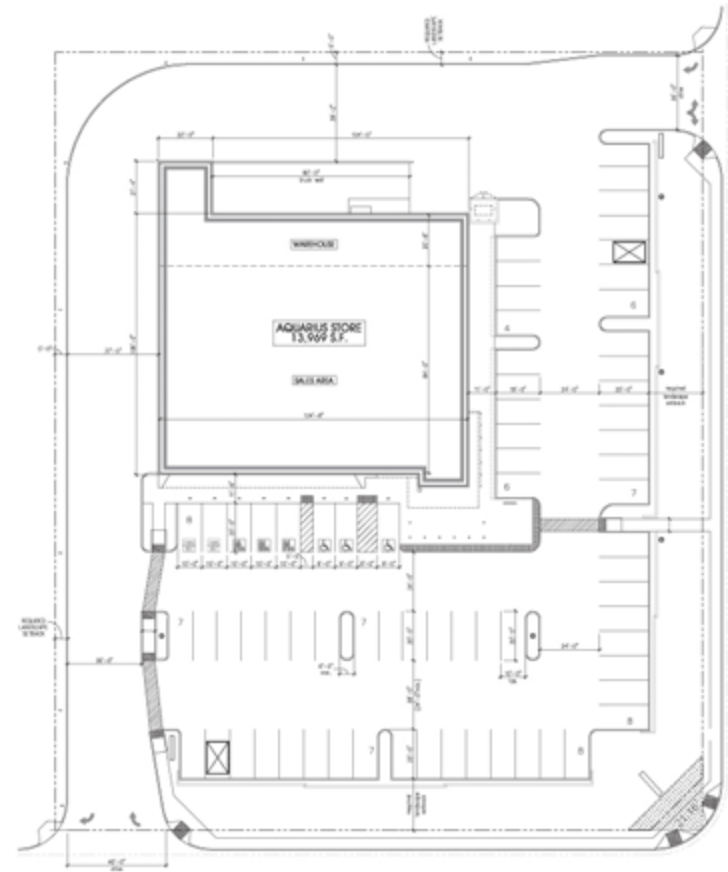
TESCO's
"Fresh & Easy:
Developing 14,000
square foot stores.
Targeted for urban
neighborhoods.

"Since we'll be right in
the neighborhood, we'll
help reduce our
customer's travel time
and boost local trade."



SITE DATA:

EXISTING ZONING	PAD
LAND AREA	83,108 S.F. = 1.94 AC.
BUILDING AREA	13,969 S.F.
BUILDING / LAND COVERAGE	16.8 CTC
PARKING REQUIRED TOTAL	69 SPACES
ACCESSIBLE PARKING	4 SPACES
PARENT & CHILD PARKING	2 SPACES



Mixed Used Infill

- Concord, California



Personal Choice

- 38 Million Americans Move Every Year
- Lots of Opportunity to Shorten Commutes
 - 4,068,000 moved in connection with a change in job
 - 1,342,000 moved to shorten their commute

(Source: Census Bureau, 2005)



GreenDividend

A Great Opportunity for Tampa Bay

For More Information

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