The background of the slide is a light teal color with a faint, detailed line-art sketch of a city grid, showing various building footprints, streets, and parks. The sketch is rendered in a slightly darker shade of teal, creating a subtle texture behind the text.

Thinking Ahead

Thoughts on Density
and Transit Oriented
Development in South
Portland



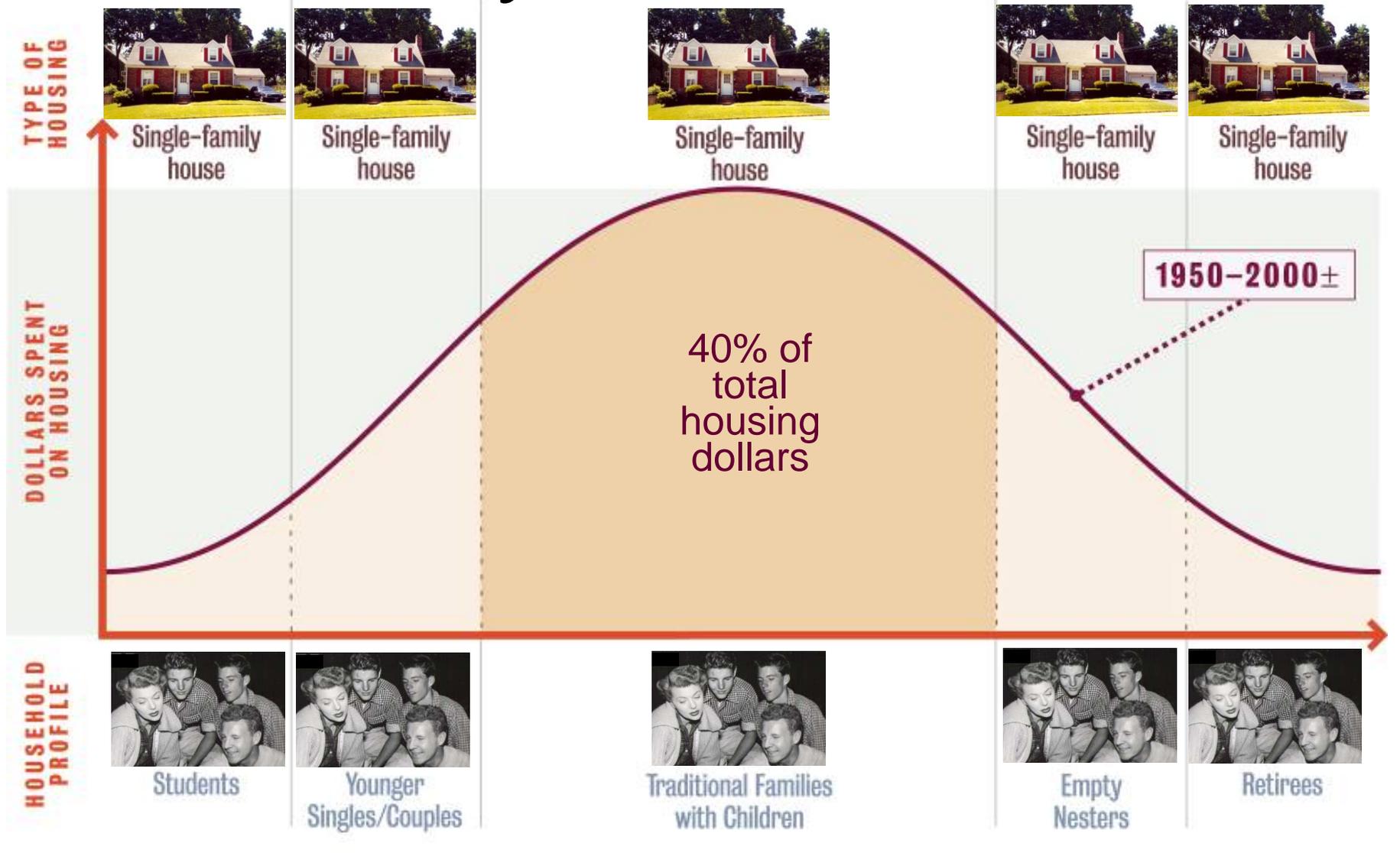
Some presentation material
graciously loaned to the
South Portland Planning &
Development Department by
Goody Clancy Associates,
Boston.

A changing America sets the stage for a new generation of community building...

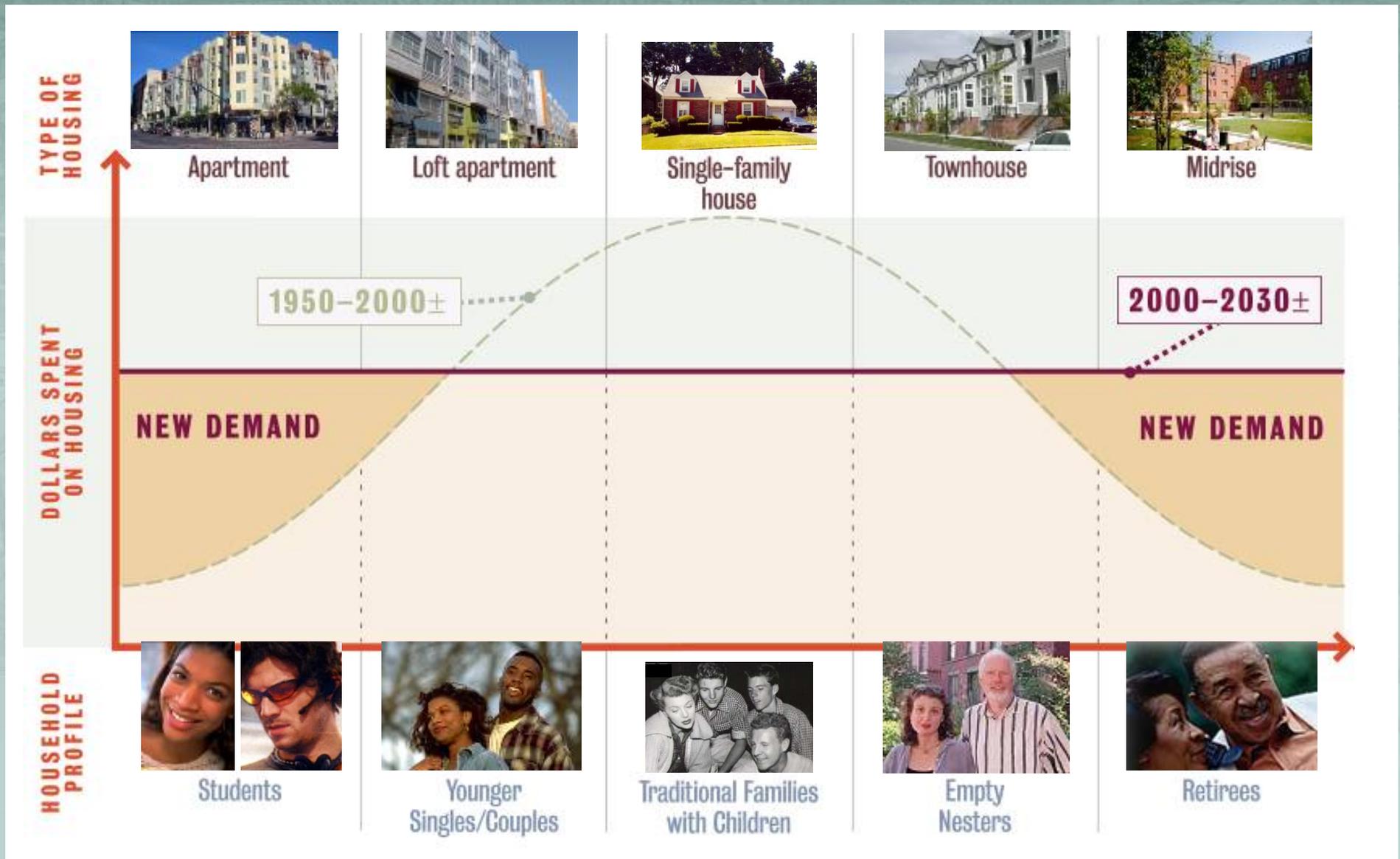
Can density help us build a new urban renaissance?



The demographics of housing demand have changed dramatically: 1950s-90s...



...today



Increased diversity extends beyond age and race

- Married couple with children—less than 25 percent of American households.
- Traditional (one-worker) family—less than 15 percent of American households.



Information from Laurie Volk, Zimmerman/Volk

...far beyond

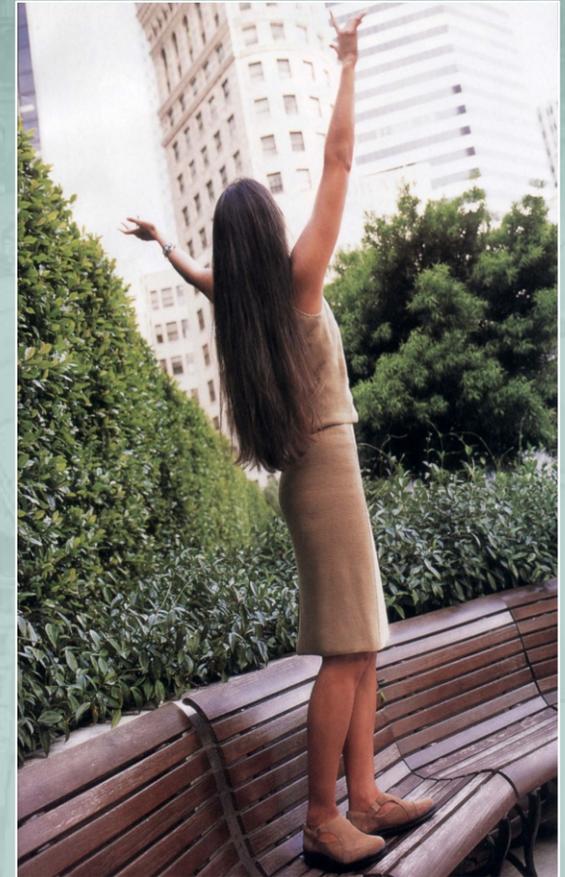
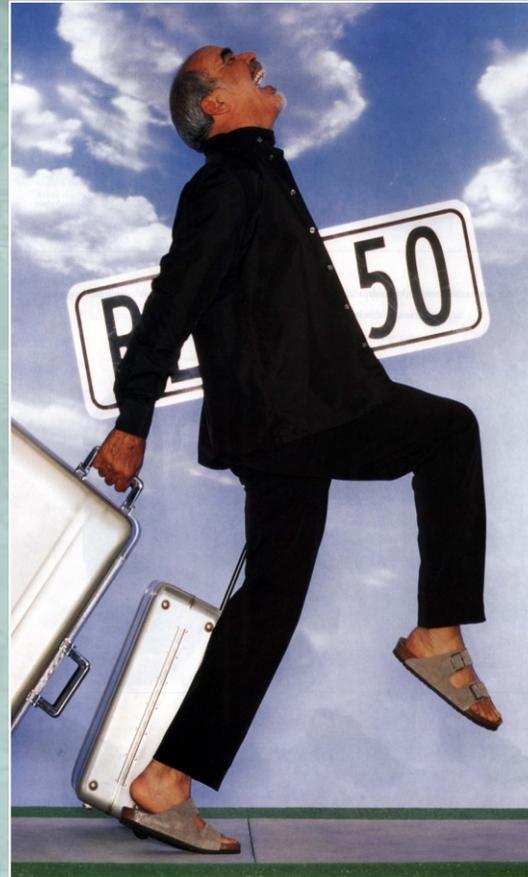
- Non-family households now outnumber traditional families in the suburbs.
- More than two million grandparents are raising their grandchildren.
- 9 percent of home purchases made by single men.
- ...21 percent by single women.
- More than five million households contain unmarried couples (up 66% since 1990).
- 20 percent aged 30 to 40 foreign born

Information from Laurie Volk, Zimmerman/Volk



Baby boomers and millennials represent a powerful market force

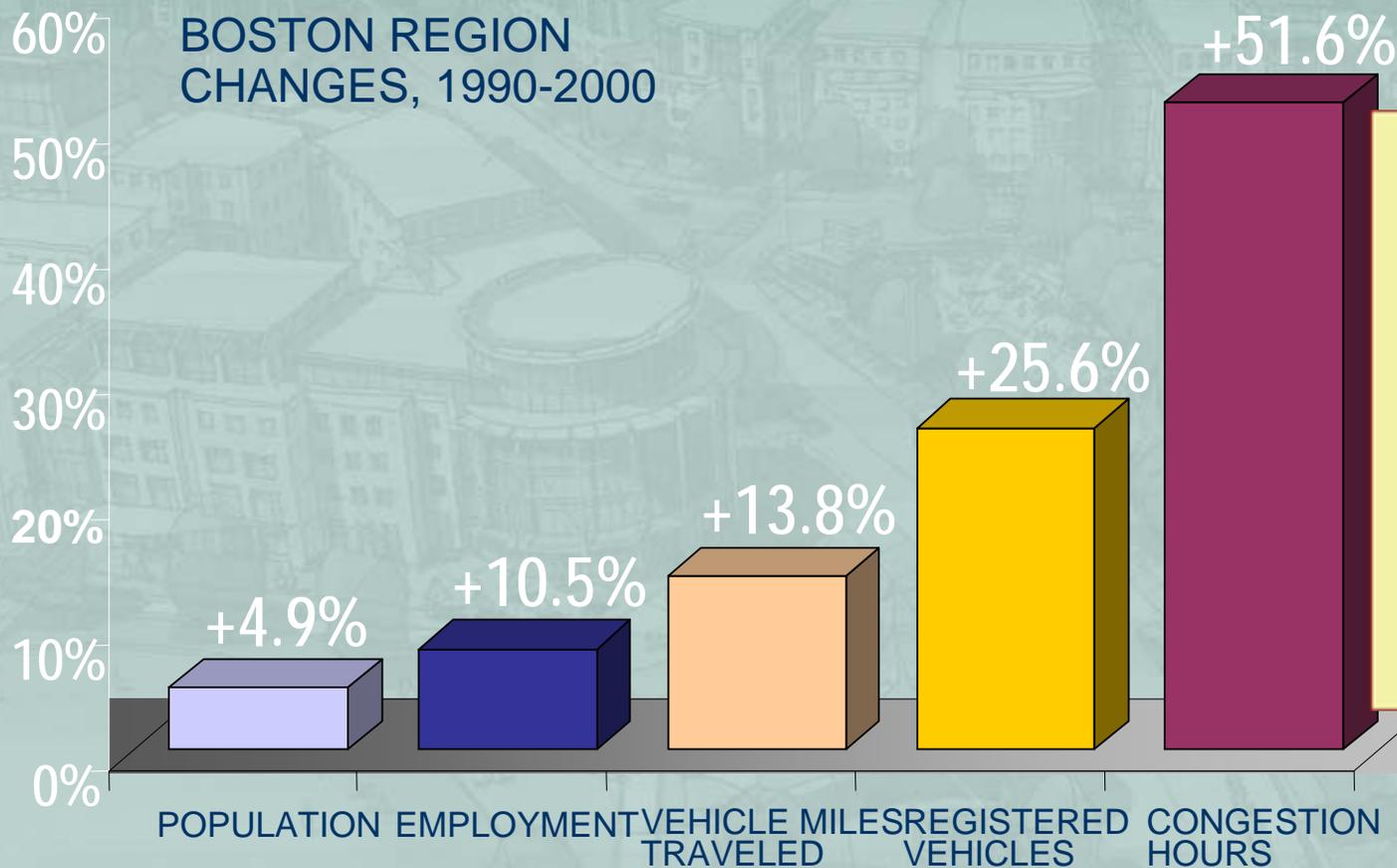
- The Baby Boom—82 Million 1946-1964
- The Millennials—78 Million 1977-1996



Information from Laurie Volk, Zimmerman/Volk

Changing Values: congestion is now viewed as undermining quality of life

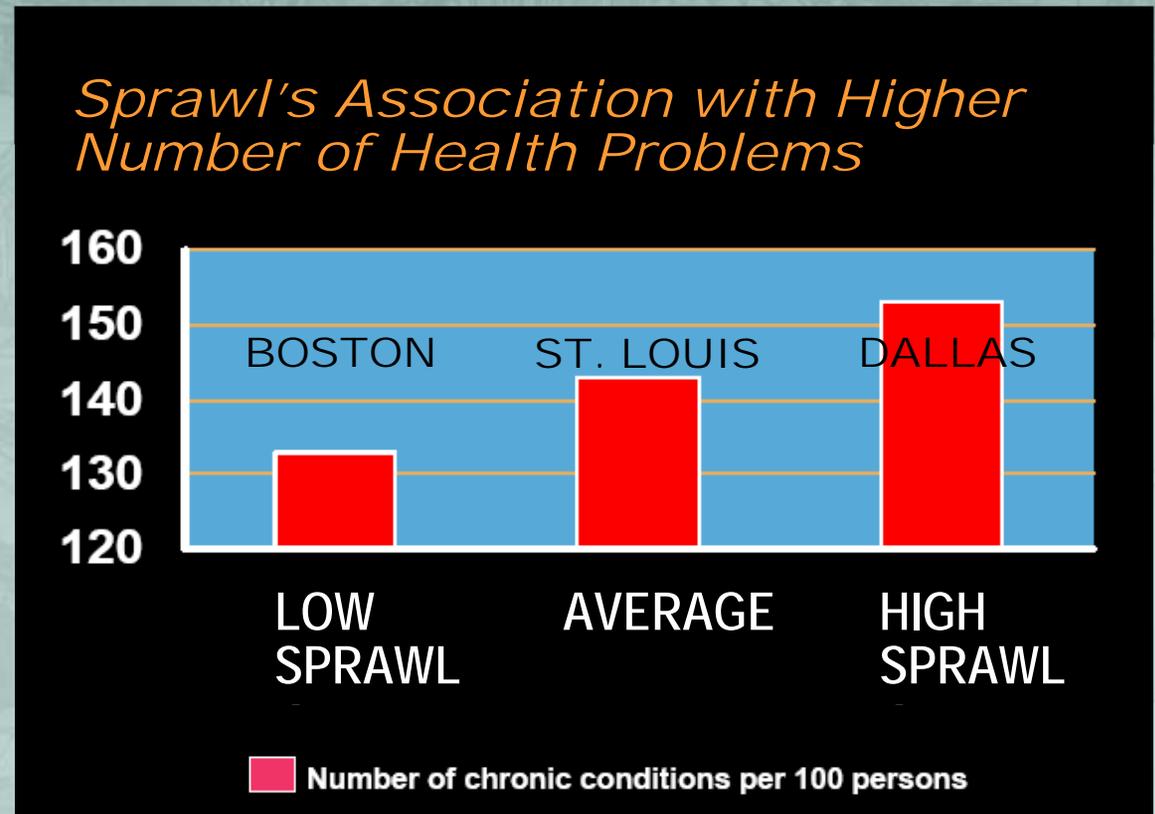
Average commuter today spends more than an entire workweek per year stuck in traffic. — TEXAS TRANSPORTATION INSTITUTE



The Boston Globe reported that more than 75% polled now report that a shorter commute would be a primary factor in choosing a next house

A growing awareness that compact communities are healthier

- CDC: Denser communities have less obesity, diabetes, high blood pressure
- According to a recent national health survey, sprawl and low density correlate more highly with reduced health than...
 - race
 - reducing income by 50%



...and our kids really don't walk to school

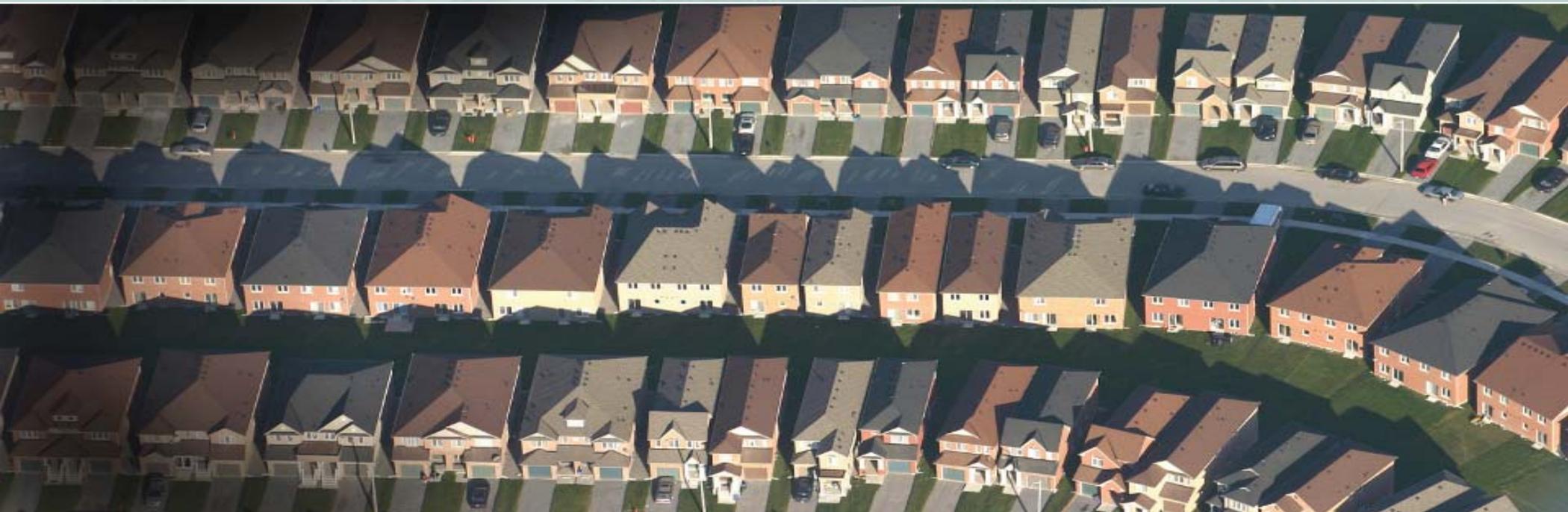
60% of Children walked to school to school in 1973...



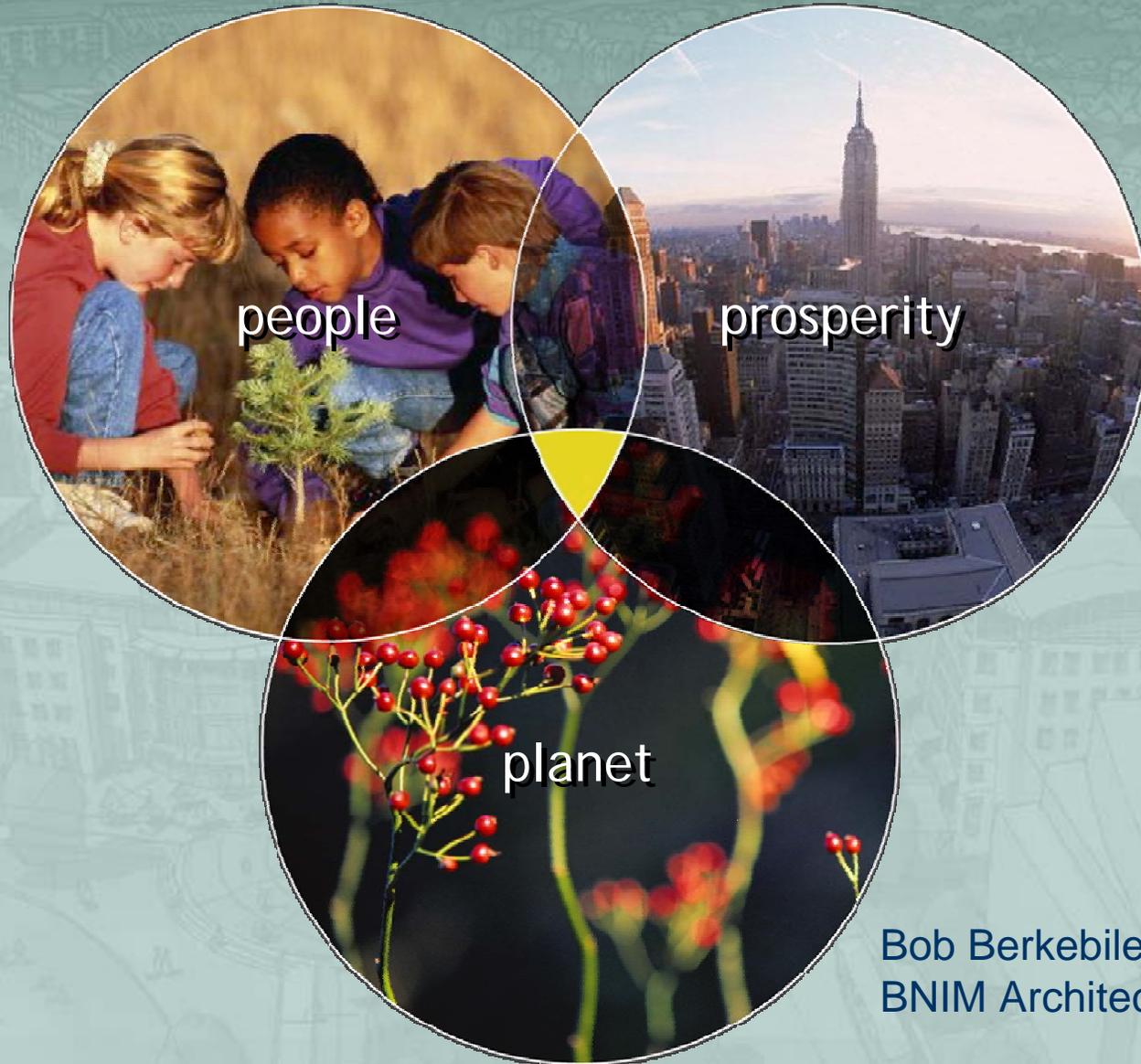
...NOW only **13%** do.
Metropolis October 2006

...and auto-oriented communities are viewed less as safe havens

- When traffic fatalities + violent crime are combined, residents are 20% more likely to die in the suburbs than urban centers
- Manhattan...yes Manhattan... is the healthiest community in America



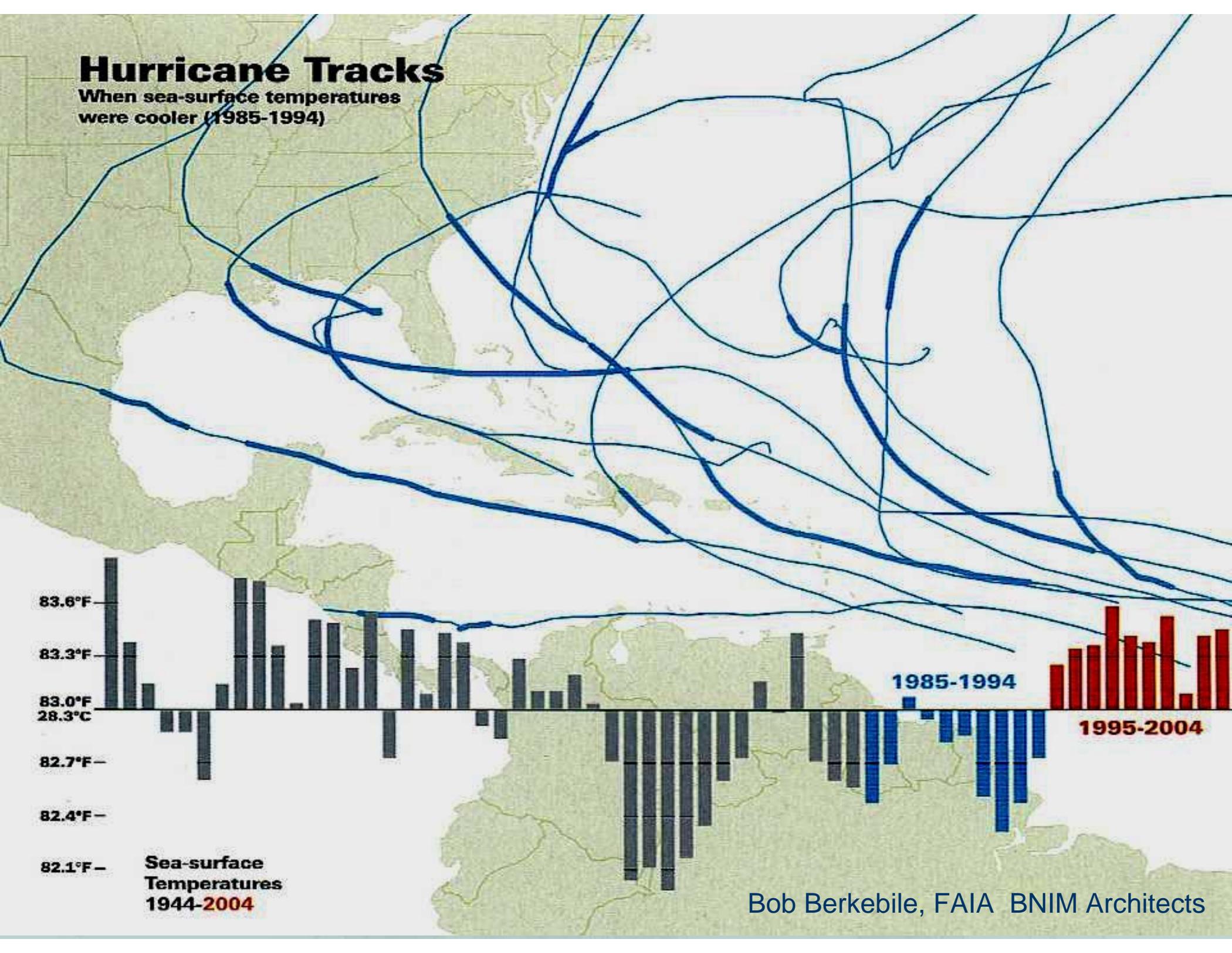
Sustainability has become personal



Bob Berkebile, FAIA
BNIM Architects

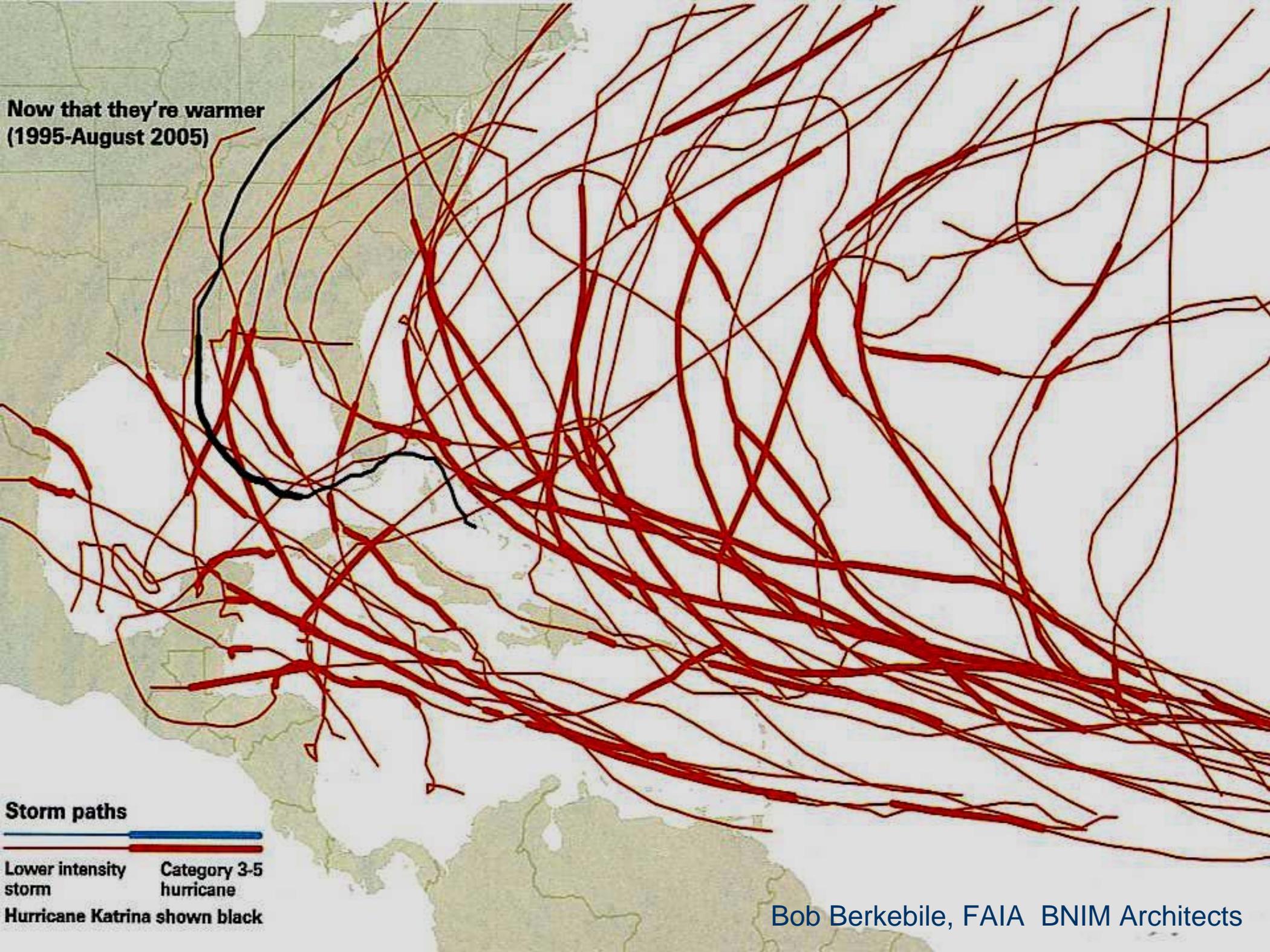
Hurricane Tracks

When sea-surface temperatures were cooler (1985-1994)



Sea-surface
Temperatures
1944-2004

**Now that they're warmer
(1995-August 2005)**



Storm paths

— Lower intensity storm
— Category 3-5 hurricane

Hurricane Katrina shown black

Bob Berkebile, FAIA BNIM Architects

Positive proof of global warming.



**18th
Century**

1900

1950

1970

1980

1990

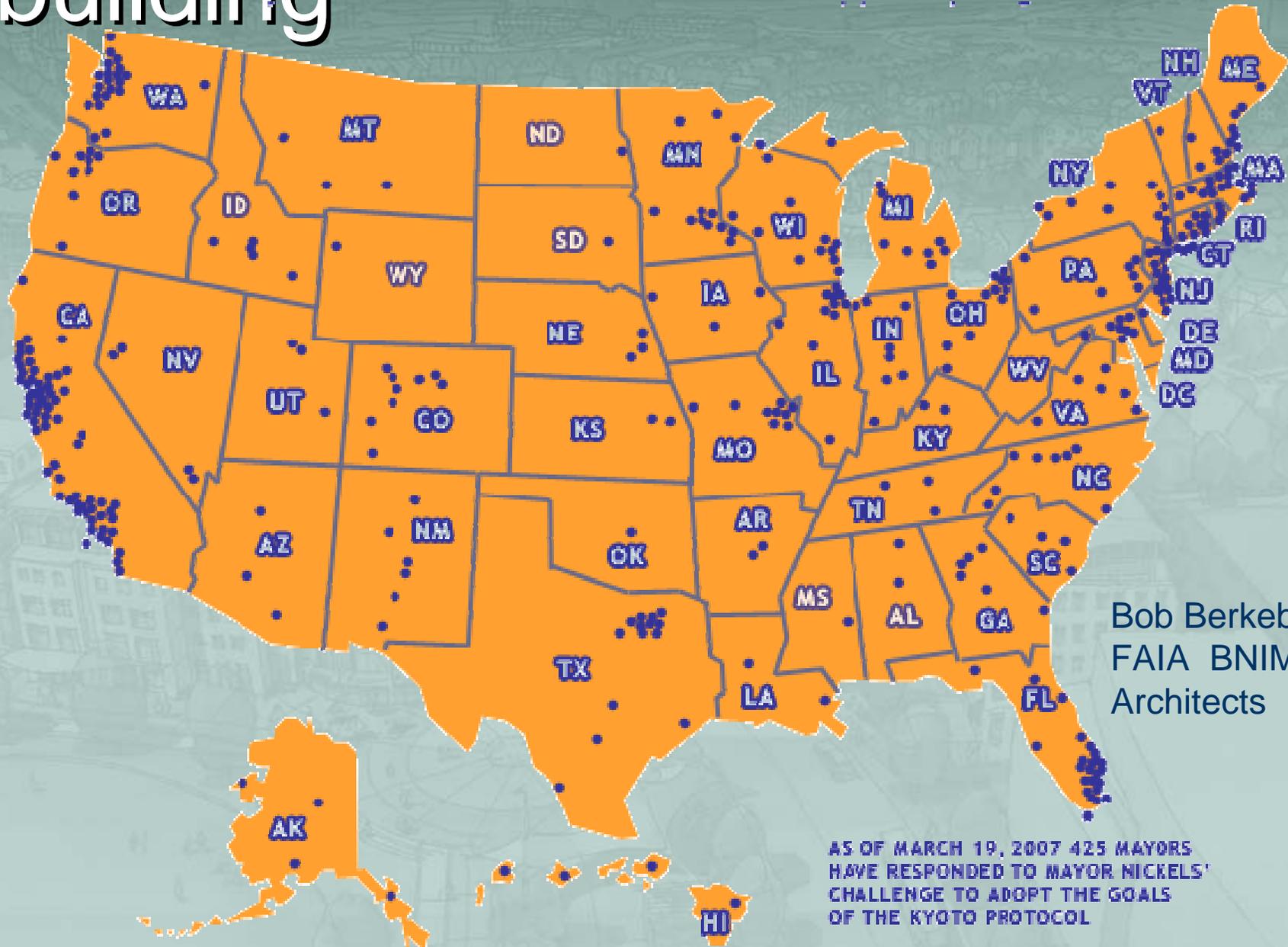
2006

Bob Berkebile, FAIA BNIM Architects



Bob Berkebile, FAIA BNIM Architects

Mayors are committing to green building



Bob Berkebile,
FAIA BNIM
Architects

AS OF MARCH 19, 2007 425 MAYORS
HAVE RESPONDED TO MAYOR NICKEL'S
CHALLENGE TO ADOPT THE GOALS
OF THE KYOTO PROTOCOL



CITY OF SOUTH PORTLAND

CLAUDE V. Z. MORGAN
Mayor

JAMES GAILEY
Acting City Manager

SUSAN M. MOONEY
City Clerk

MARY KAHL
Corporation Counsel

District One
CLAUDE V. Z. MORGAN

District Two
KATHERINE H. LORING

District Three
JAMES A. SOULE

District Four
MAXINE BEECHER

District Five
JAMES HUGHES

At Large
LINDA R. BOUDREAU

At Large
RALPH BAXTER, SR.

**IN CITY COUNCIL
RESOLVE#3-07/08**

WHEREAS, the United States of America, with less than five percent of the world's population is responsible for producing approximately twenty-five percent of the world's global warming pollutants; and

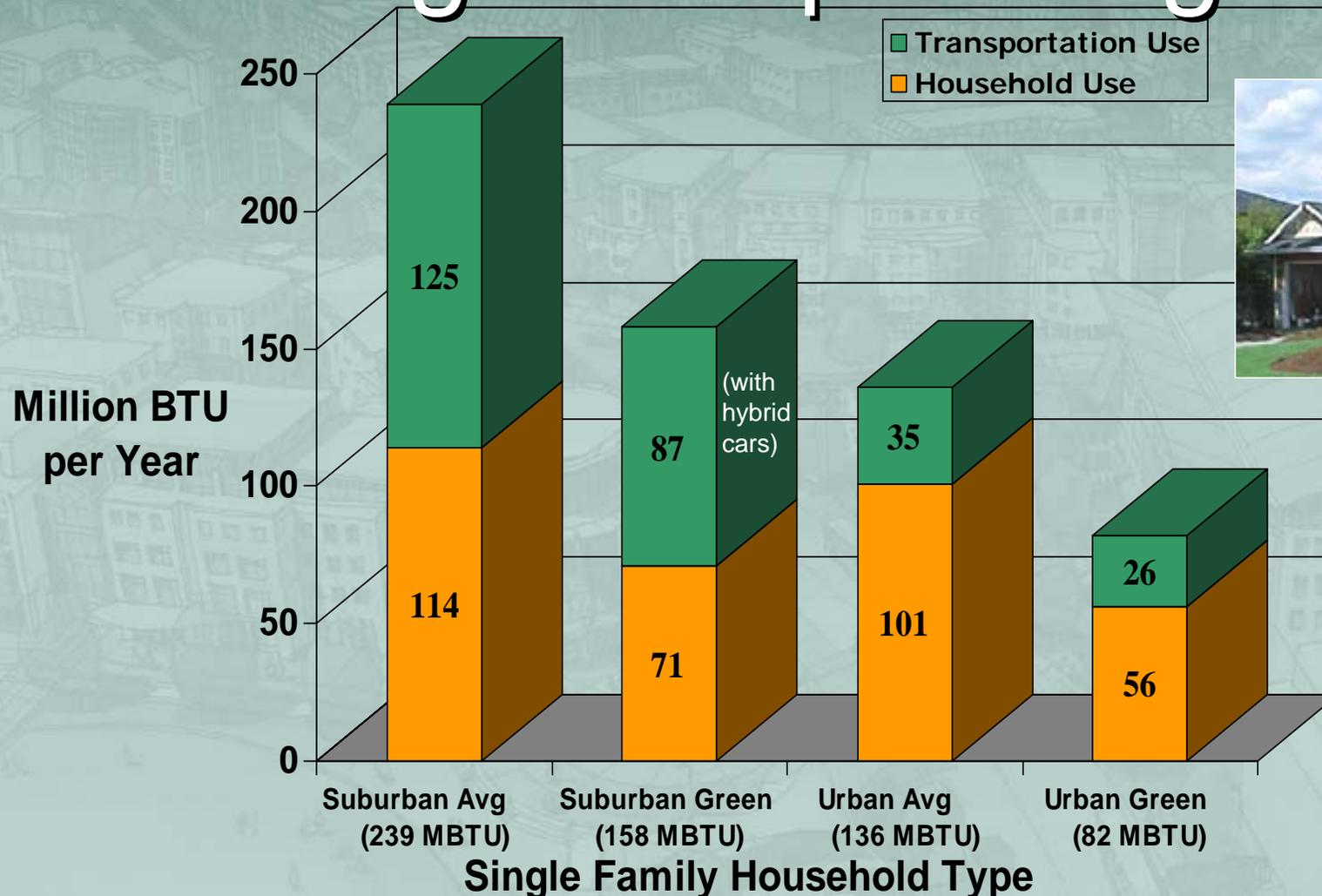
WHEREAS, Cities throughout the nation, both large and small are reducing global warming pollutants through programs that provide economic and quality of life benefits such as reduced energy bills, green space preservation, air quality improvements, reduced traffic congestion, improved transportation choices and economic development job creation through energy conservation and new energy technologies.

NOW, THEREFORE, BE IT RESOLVED THAT, while taking no position as to whether the United States should ratify the Kyoto Protocol on climate change, the South Portland City Council authorizes the Mayor to sign *The U.S. Mayors Climate Protection Agreement* on behalf of the City of South Portland, thereby joining hundreds of cities across the country that have already signed the accord and helping South Portland achieve a sustainable and livable city for many years to come.

Fiscal note: Less than \$1,000

Dated: September 5, 2007

Sustainability requires a commitment to green building...and planning



REALITY CHECK

ON



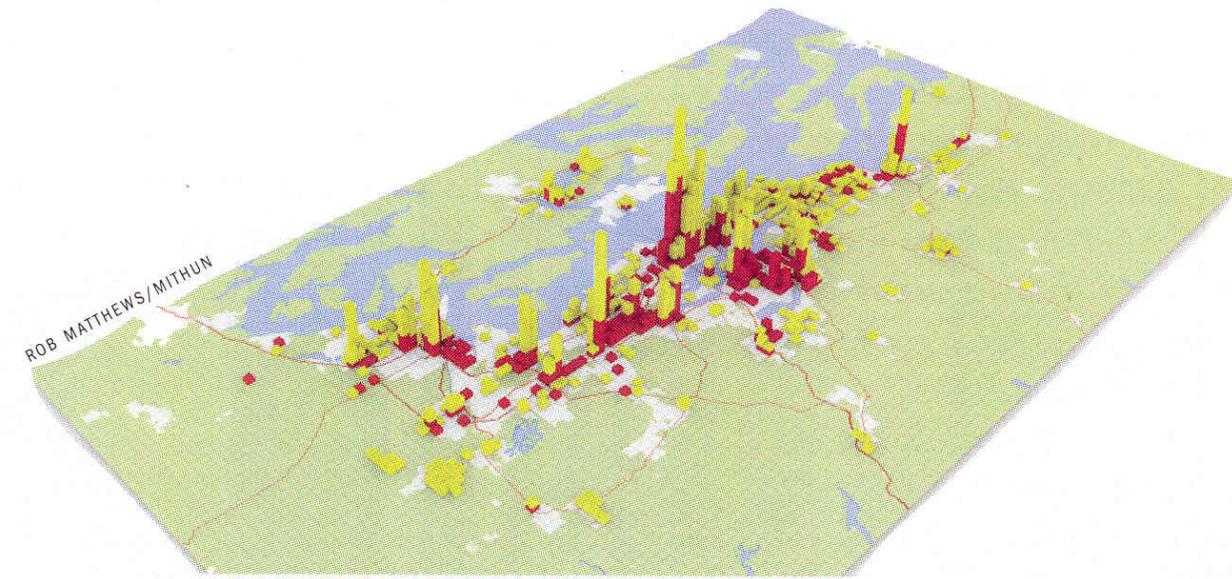
Players at the central Puget Sound Reality Check event witnessed—almost in real time—the effect their land use and transportation decisions would have on greenhouse gases and climate change.

MORE AND MORE PEOPLE are beginning to live in compact, walkable communities. It's no longer just a lifestyle choice; a compact community model is becoming a necessity for the future of the planet. At the Reality Check event, sponsored by the Puget Sound Urban Land Institute at the end of April, participants used a game to explore how future development could affect the course of global warming. The game's results back showed them previous decisions—about where to build, roads, and transit—would have on greenhouse gas emissions.

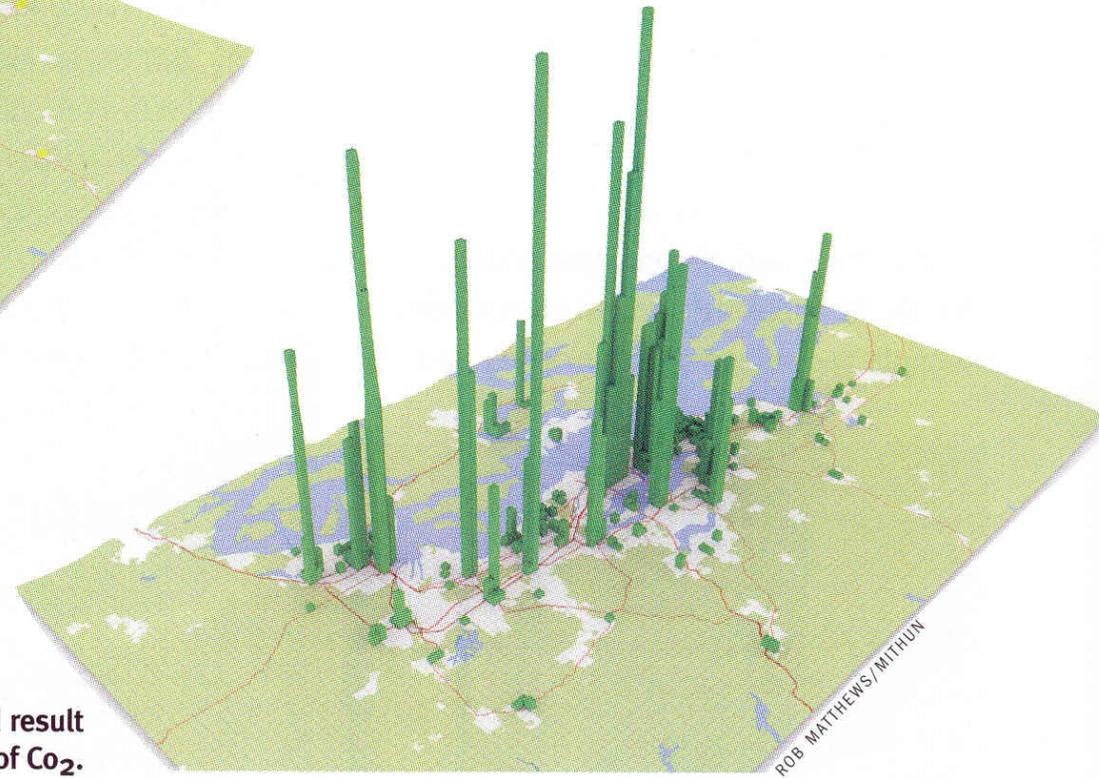
Reality Check is a unique process developed by the Urban Land Institute. Invited community leaders and planners used scale regional maps that they placed on a board. They negotiated and placed markers to represent the numbers of buildings, jobs, and also positioned markers to indicate transportation corridors. The game has been held in several cities, including metropolitan Los Angeles and Washington, D.C. Customized data and geographic information for central Puget Sound was used to calculate the proximity of jobs to transit and into vehicle miles traveled.

Calculations of the results of the game revealed what the Legos would mean for the Puget Sound environment.

**Urban Land
June 2008**



In the above example of compact development, each yellow Lego represents 2,000 residents and each red Lego equals 2,000 jobs.



The diagram (at right) shows greenhouse gas reductions that could result from land use decisions. Each green Lego equals 1,000 metric tons of CO_2 .

“People who live in walkable, mixed-use communities drive almost 30% fewer miles... .” (Edward McMahon)

“... fewer and shorter trips result in lower greenhouse gas emissions—and less climate change.” (Urban Land 7/08)

A New Economic Equation: sprawl has become too expensive

- **Urbanized land grew 400% faster than population, 1950-90**
- **Lincoln Institute—northeast states can save \$25 billion by pursuing more compact development over the next 25 years**
- **Denser communities use less energy: Manhattan uses least per capita of any U.S. city**



Lively walkable neighborhoods build regional economic competitiveness

- Peter Kwass: “Jobs now follow people who can do the jobs...”
- “Creative class”—urban neighborhood amenities attract employees in high-tech and similar industries
- Almost no state or city can support the costs of sprawl today

New downtown mixed-use district being planned for Boston



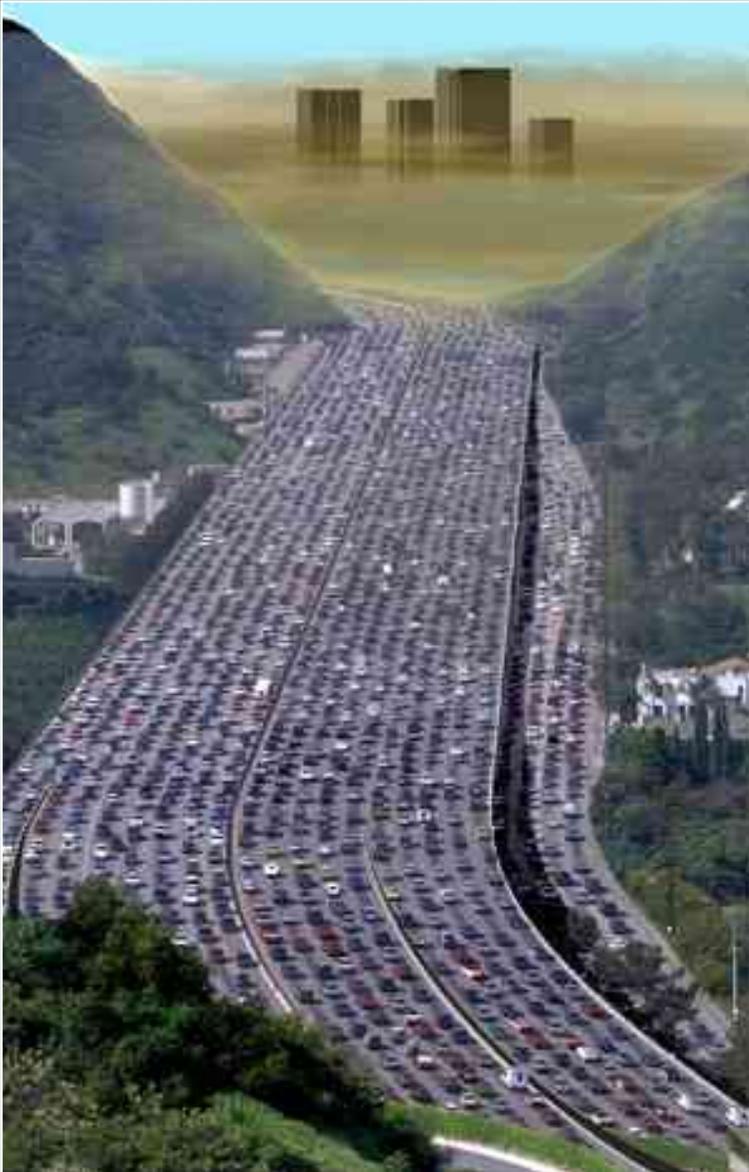
Increasing demand for housing that supports alternatives to the car

- 71% of older households want to be within walking distance of transit.
- By 2025, 14.6 million households are expected to want housing within a half-mile of fixed-guideway transit.



Streetcars again in South Portland?

...and a willingness to own fewer cars



“TOD housing in large cities produces 40-50% fewer cars per household than other new housing...”

URBAN LAND INSTITUTE

The value of mixed-use, walkable developments is rising

GROWTH IN RENTS 2000-2007
FOR SUBURBAN OFFICE
PARKS: **0%**



GROWTH IN RENTS 2000-2007
FOR MIXED-USE,
WALKABLE
DEVELOPMENTS: **+35%**



Mixed-use downtowns have become a better REIT investment

- Before 1987, “24-hour” cities were worst investment and “edge cities” at best
- Since 1987, “24-hour” cities have outpaced other investments

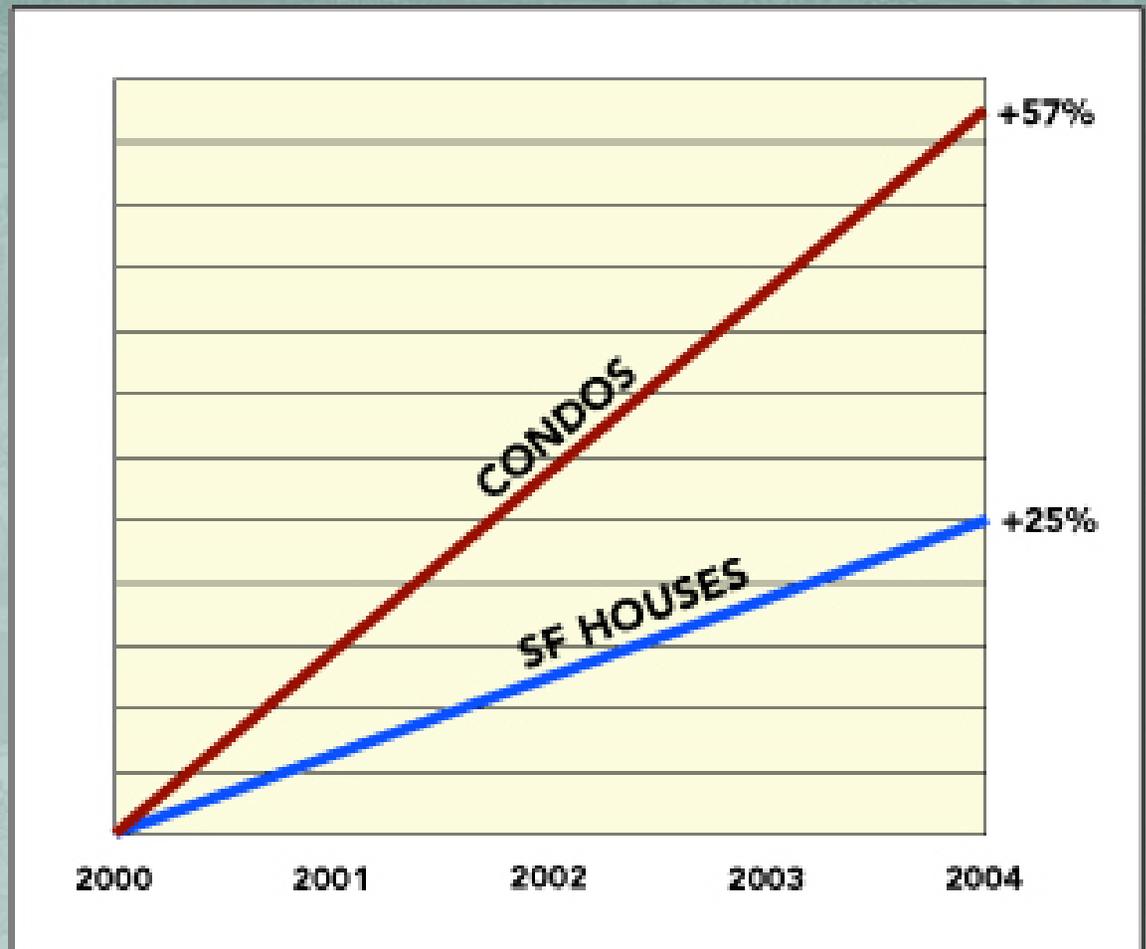


...challenging decades' old assumptions about value

“For many...an urban condo is more luxurious... than a...yard”

“Last year, for the first time...the price of a condo was higher than that of a single-family home”

WALL STREET JOURNAL



The price of condos is rising much faster than the price of single-family houses

Transportation Fuel Costs



Portland, Maine

2000 Gas Price: \$1.62/gal

2008 Gas Price: \$4.14/gal

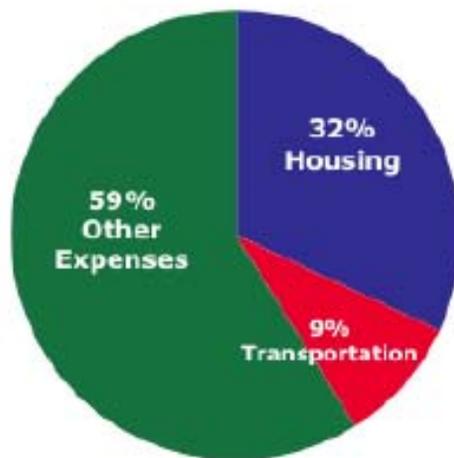
Photo: Maine NEMO

Data: Center for Neighborhood Technology

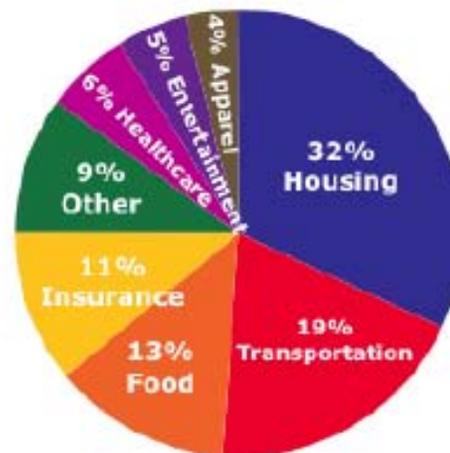
Density and Affordability: Housing + Transport

LOCATION MATTERS, BECAUSE TRANSPORTATION IS A SIGNIFICANT HOUSEHOLD EXPENSE

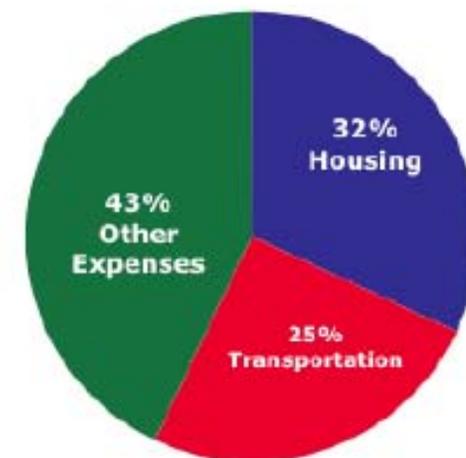
Transit Rich Neighborhood



Average American Family



Auto Dependent Neighborhood



Source: Center for TOD Housing + Transportation Affordability Index, 2004 Bureau of Labor Statistics

Density and Affordability: Housing + Transport

- Households who live in DC or close to other employment centers pay less for housing and transportation across all income levels.
- Urban areas have density to support transit options
 - Light Rail: 18-25 units/acre
 - Bus: 7 units/acre (30 min. headways)



| Household Expenditures by Income and Proximity to Employment Washington, DC PMSA | | | |
|---|-----------------|-----------|---------------|
| Expenditures by Income | Central City EC | Other ECs | Outside an EC |
| \$0-<\$20,000 | | | |
| % Income on Housing | 64% | 67% | 62% |
| % Income on Transport. | 45% | 55% | 61% |
| % Income on H+T | 109% | 122% | 124% |
| \$20,000 - <\$35,000 | | | |
| % Income on Housing | 33% | 39% | 37% |
| % Income on Transport. | 25% | 33% | 37% |
| % Income on H+T | 58% | 71% | 73% |
| \$35,000 - <\$50,000 | | | |
| % Income on Housing | 24% | 29% | 28% |
| % Income on Transport. | 18% | 24% | 27% |
| % Income on H+T | 42% | 53% | 54% |
| \$50,000 - <\$75,000 | | | |
| % Income on Housing | 20% | 23% | 22% |
| % Income on Transport. | 13% | 17% | 19% |
| % Income on H+T | 33% | 40% | 41% |
| \$75,000 - <\$100,000 | | | |
| % Income on Housing | 16% | 18% | 18% |
| % Income on Transport. | 9% | 13% | 14% |
| % Income on H+T | 26% | 31% | 32% |
| \$100,000 - <\$250,000 | | | |
| % Income on Housing | 13% | 13% | 13% |
| % Income on Transport. | 6% | 8% | 10% |
| % Income on H+T | 19% | 22% | 23% |

CNT Affordability Index



Housing and Transportation Costs as Percent of Income

by Block Group Model Data

- Data not available
- 0 to 40%
- 40 to 45%
- 45 to 50%
- 50 to 60%
- Greater than or Equal to 60%

Total Housing and Transportation Costs as Percent of Income.

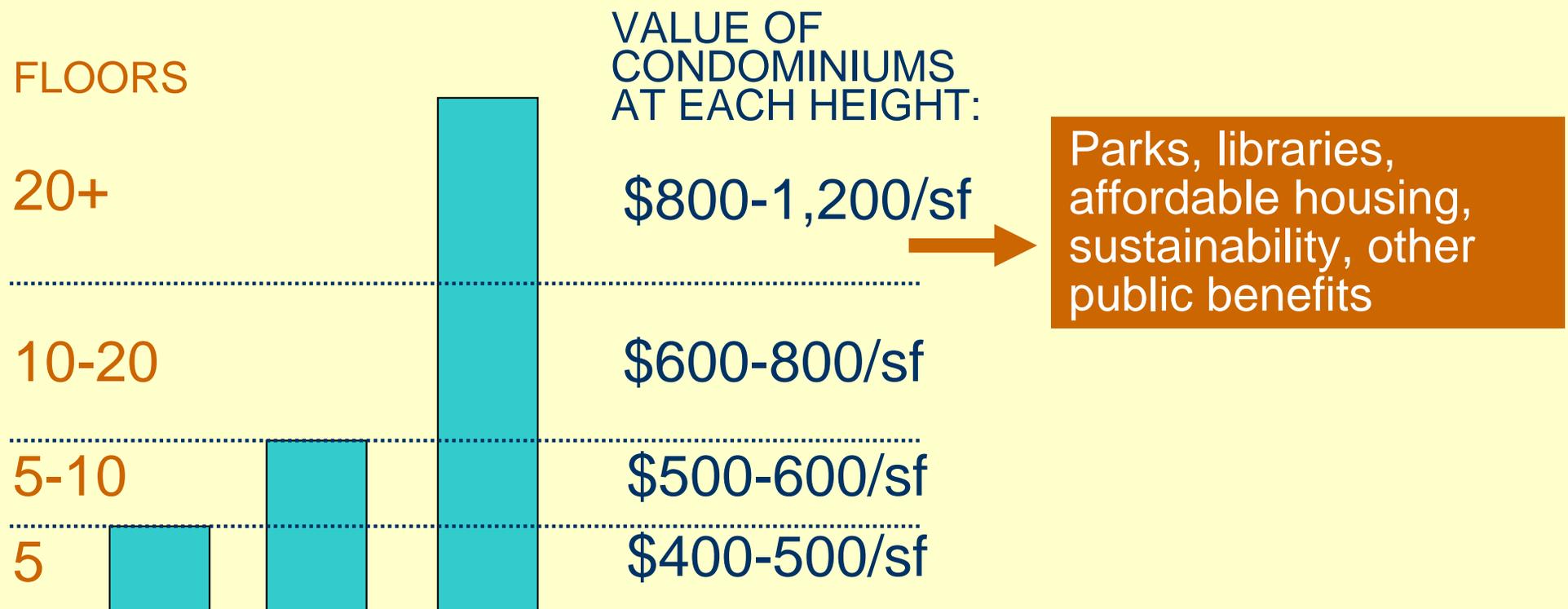
Center for Neighborhood
Technology

The impacts of density

- Decentralization—not over-development—causes congestion in most urban neighborhoods: through traffic represents up to 90%+ of the traffic that concerns many urban neighborhoods
- Density pays for the new sewers and other infrastructure that many older communities badly need
- Most neighborhoods need more people to support schools, libraries, and other civic amenities— and density can pay for needed facilities
- Higher density in most cases has a positive fiscal impact—including housing

Density can pay for amenity, livability

- In many cities height creates value—particularly for housing
- Cities use height bonuses to create parks, libraries, affordable housing, and other public benefits



Why America can not afford not to build a generation of dense TOD

- Density is essential to accommodate regional growth to avoid promoting sprawl
- ...which requires innovative solutions for established commercial districts
- ...and neighborhoods

Density literally hides...and reduces the need for...parking

- Mixed-use developments enable uses to share parking—reducing total requirements often by one-third or more
- Density and mixed-use offer opportunities to hide parking behind buildings
- ...and create value to support more expensive below-grade parking



Assembly Square, Goody Clancy

Traditional urban neighborhoods closer to the core

30-50
UNITS PER
ACRE



Isolated towers in Kansas City

30-50
UNITS PER
ACRE

Mix of row houses, flats, and lofts



Riverview, Cleveland, Goody Clancy

Traditional higher-density urban neighborhoods



50-100+
UNITS PER
ACRE

More Las
Vegas than
Las Vegas

50-100+
UNITS PER
ACRE

*Lower-rise development
in an historic district*



Boston's historic South End, Langham Court, Goody Clancy



CBT's North Point Plan

The Case for Density:

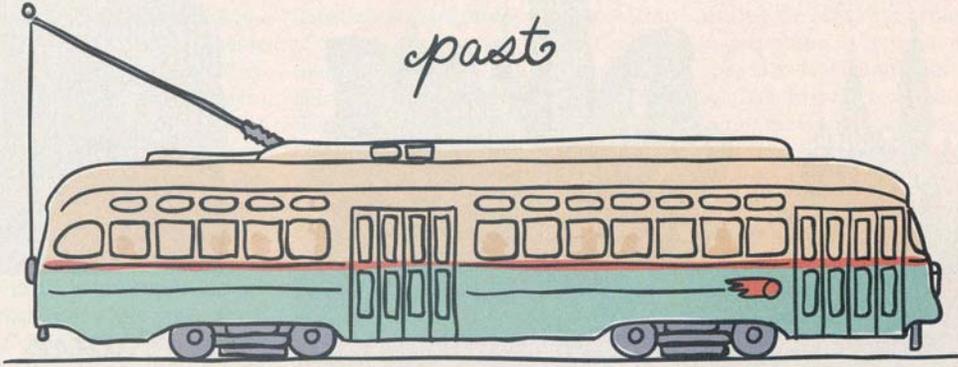
- Demographics: Housing Choices
- Health
- Commuting Time
- Transportation Mode Choice
- Transportation Expense
- Environmental Sustainability:
Climate + Energy
- Cost of Sprawl
- Real Estate Value

Transit Oriented Development

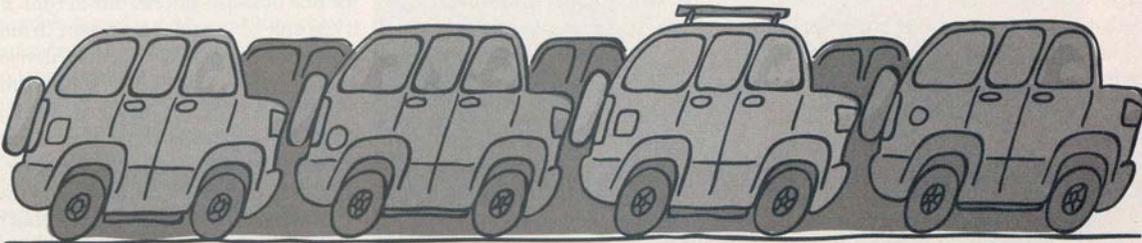
- Transit-Oriented Development, or TOD, is typically defined as more compact development within easy walking distance of transit stations (typically a half mile) that contains a mix of uses such as housing, jobs, shops, restaurants and entertainment.
- TOD is really about creating walkable, sustainable communities for people of all ages and incomes and providing more transportation and housing choices (including townhomes, apartments, live-work spaces, and lofts).
- These neighborhoods provide for a lifestyle that's convenient, affordable and active, and create places where our children can play and our parents can grow old comfortably.

mass transit

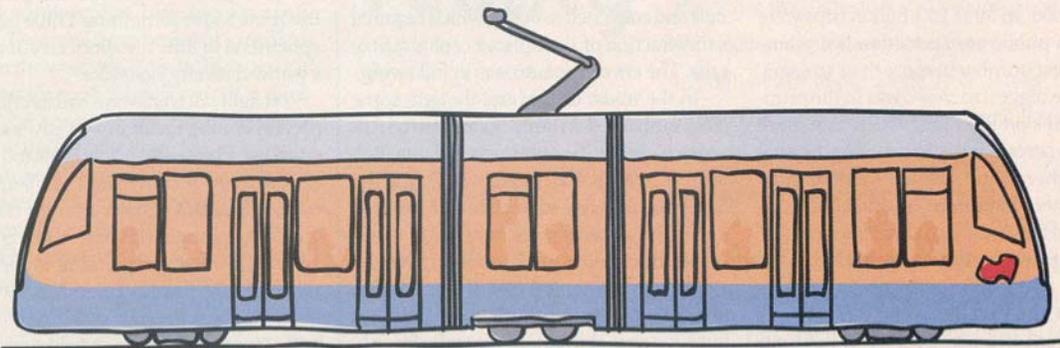
past



present

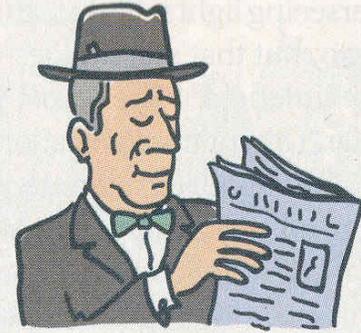


future

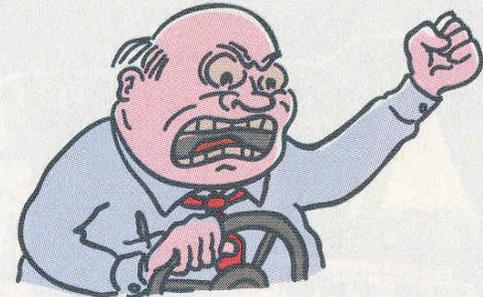


g

the commuter



past



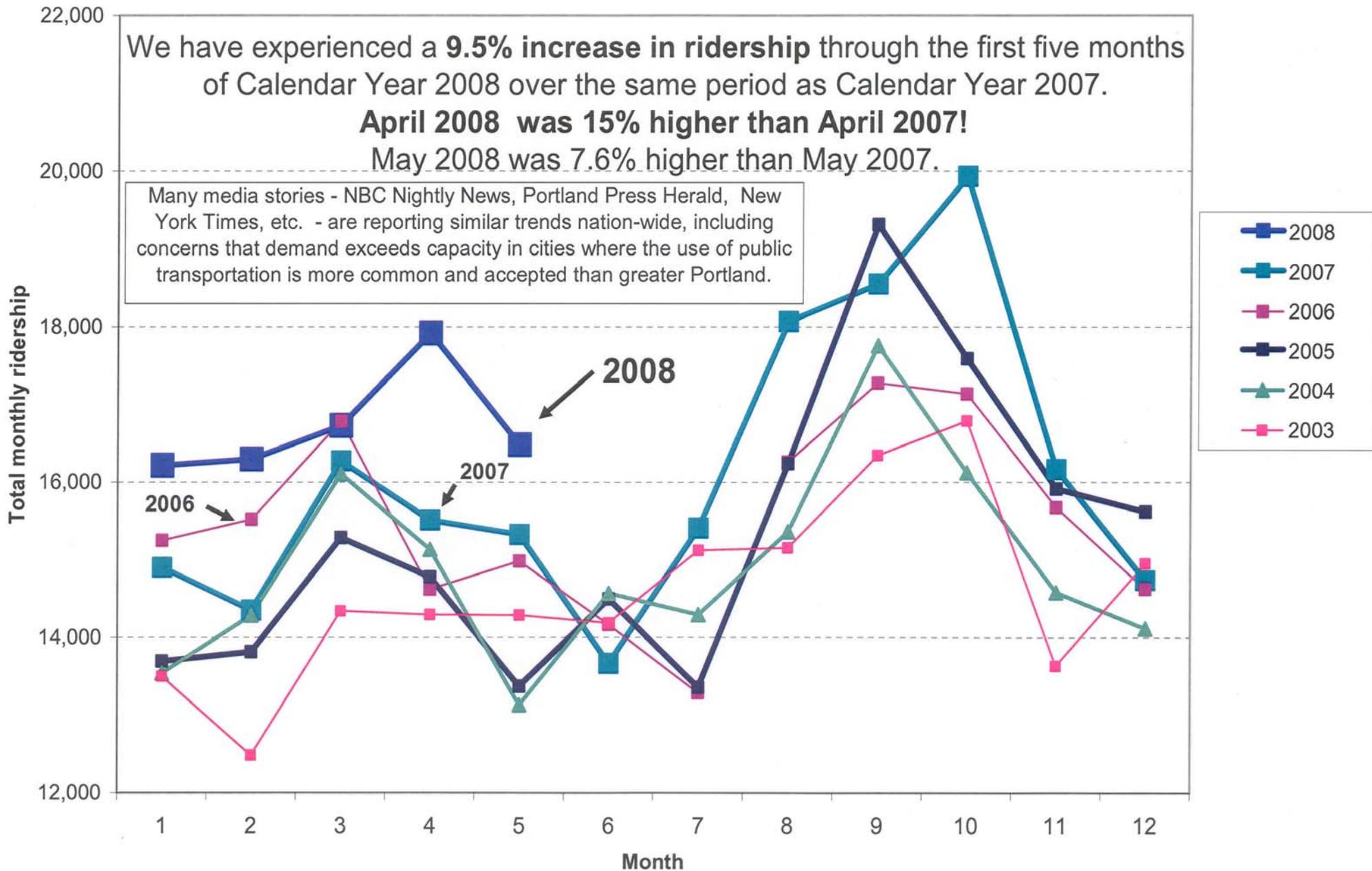
present



future

South Portland Bus Service

Calendar Year 2008 - Ridership by month
compared with Calendar Years 2003 through 2007



Riverton Park 1902



STREETCARS ARE UNIQUELY SUITED TO TOD



Hot “new” transit technology

- Faster and cheaper to build
- Promote private investment in compact development
- Can be built for as little as \$3 million a mile (Kenosha, WI)
- 100 cities have joined the Community Streetcar Coalition

Street Cars Return on Investment

TABLE 1: Private Returns on the Public Investment

| | Start of Service | Initial Track Miles | Initial System Cost Per Track Mile | Initial System Cost | Development Investment | Return on Investment |
|-----------------|------------------|---------------------|------------------------------------|---------------------|------------------------|----------------------|
| Kenosha | 2000 | 2.0 | 3.10 | 6.20 | 150 | 2319.35% |
| Little Rock | 2004 | 2.5 | 7.84 | 19.60 | 200 | 920.41% |
| Tampa | 2003 | 2.4 | 20.13 | 48.30 | 1000 | 1970.39% |
| Portland (1) | 2001 | 4.8 | 11.50 | 55.20 | 1046 | 1794.93% |
| Portland (Ext.) | 2005 | 1.2 | 14.83 | 17.80 | 1353 | 7501.12% |

Source: Reconnecting America (Dollar Figures in Millions)

WE ARE SPRAWLING AND REINVESTING SIMULTANEOUSLY



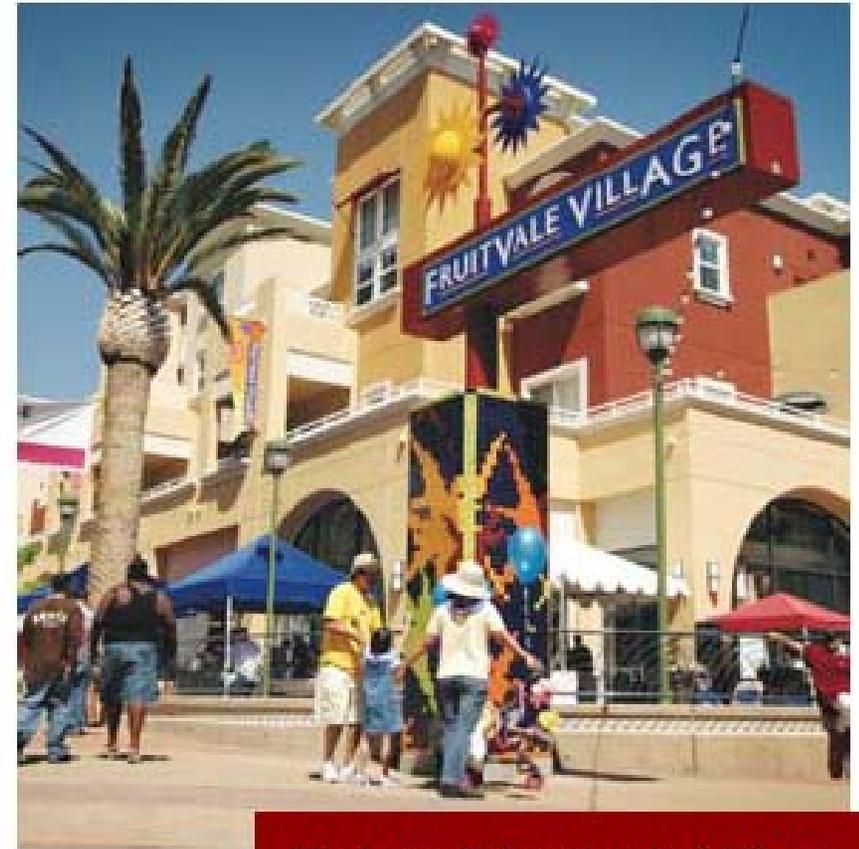
Indications that the balance will shift to reinvestment:

- Higher gas and oil prices;
- Infill is getting easier to finance and can be lucrative;
- Capital for infrastructure is getting tighter;
- Major homebuilders and retailers developing infill models.

WHY IS TOD GOOD FOR CITIES AND SUBURBS?

TOD:

- Helps conserve open space
- Less oil and gas consumption
- More sustainable and efficient
- Minimizes traffic increases
- Promotes healthier lifestyles
- Reduces transportation costs
- Creates safer neighborhoods
- Creates opportunities for mixed-income housing
- Increases transit ridership



Pictured: Fruitvale Village
in Oakland, CA

TOD CREATES VALUE THAT CAN BE CAPTURED



ULI reports, TOD can't miss, because "people congregate there."

Value Capture Strategies

- Property and sales taxes
- Real Estate lease and sales
- Farebox revenues
- Fees on parking, business licenses, etc.
- Joint development
- Tax-increment financing
- Special assessment districts
- Public-private partnerships

WHAT CAN WE DO? TOD IS ONE POSSIBLE SOLUTION TO A HOST OF PROBLEMS

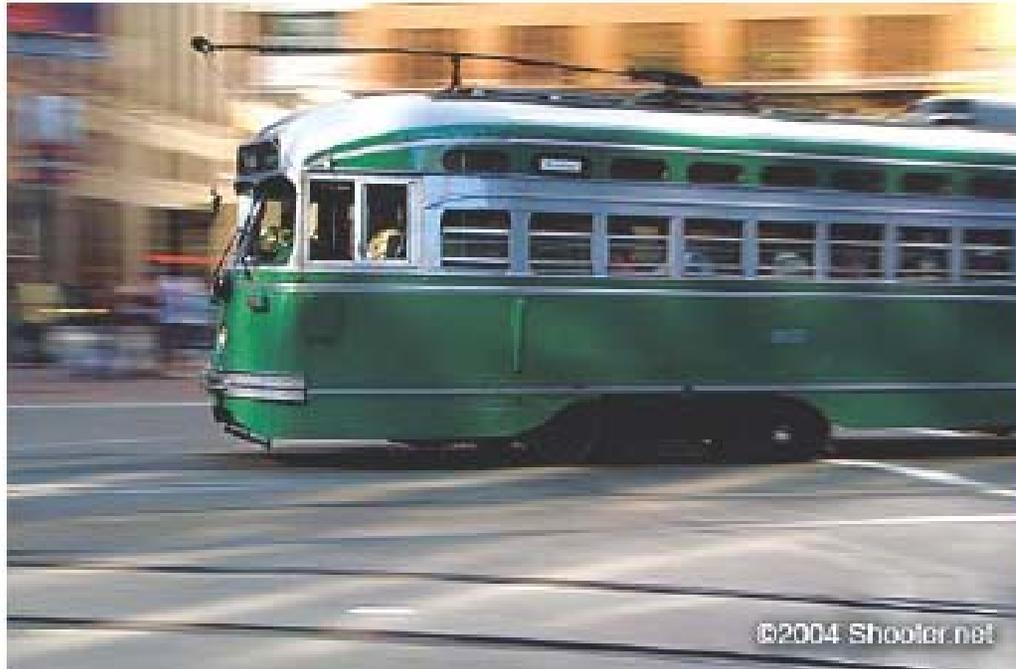
Looming crises:

- Affordability
- Traffic congestion
- Suburban sprawl
- Global warming
- Enormous infrastructure costs
- Dependence on foreign oil



*Traffic Congestion with a VMS (Variable Message Sign)
Copyright by Texas Transportation Institute, 2004*

WHAT CAN WE DO? **TOD IS ONE POSSIBLE SOLUTION TO A HOST OF PROBLEMS**



ONE SOLUTION: Build more mixed-income communities around transit to provide Americans With more housing and transportation choices so they can lead affordable, convenient, active lives

TOD & Density

- Transit Oriented Development and positive urban density are mutually supportive.
- The better the transit service, the greater the ability to attract development investment.
- Fixed guideway transit, like modern streetcars, give investors the most confidence.
- TOD development in turn can be tapped to help finance public transit.

In Conclusion

Nodes or sections of higher density Transit Oriented Development, supported by significant federal, state, and local investment in public transit, may play a desirable role in a long-term regional solution to the energy/climate crisis and other challenges and opportunities ahead.