



Learning to Do It Together—How Transportation Policies Affect Ohio's Communities—Initial Results of a Scan for the Brookings Institution and Greater Ohio

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Ohio Restoring Prosperity

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METROPOLITAN POLICY PROGRAM

The Affordability Index: A New Tool for Measuring the True Affordability of a Housing Choice

By Center for Transit-Oriented Development and Center for Neighborhood Technology

This brief describes a new information tool developed by the Urban Markets Initiative to quantify, for the first time, the impact of transportation costs on the affordability of housing choices. This brief explains the background, creation, and purpose of this new tool. The first section provides a project overview and a short summary of the method used to create the Affordability Index. The next section highlights the results from testing the index in a seven-county area in and around Minneapolis-St. Paul, MN. To demonstrate the usefulness of this tool at a neighborhood level, the third section projects the effect of transportation and housing choices on three hypothetical low- and moderate-income families in each of four different neighborhoods in the Twin Cities. The brief concludes with suggested policy recommendations and applications of the new tool for various actors in the housing market, and for regulators, planners, and funders in the transportation and land use areas at all levels of government.

The Housing and Transportation Affordability Index is a groundbreaking innovation because it prices the trade-offs that households make between housing and transportation costs and the savings that derive from living in communities that are near shopping, schools, and work, and that boast a transit-rich environment. Built using data sets that are available for every transit-served community in the nation, the tool can be applied in neighborhoods in more than 42 cities in the United States. It provides consumers, policymakers, lenders, and investors with the information needed to make better decisions about which neighborhoods are truly affordable, and illuminate the implications of their policy and investment choices.

I. Housing and Transportation: Key Elements of the Cost of Living

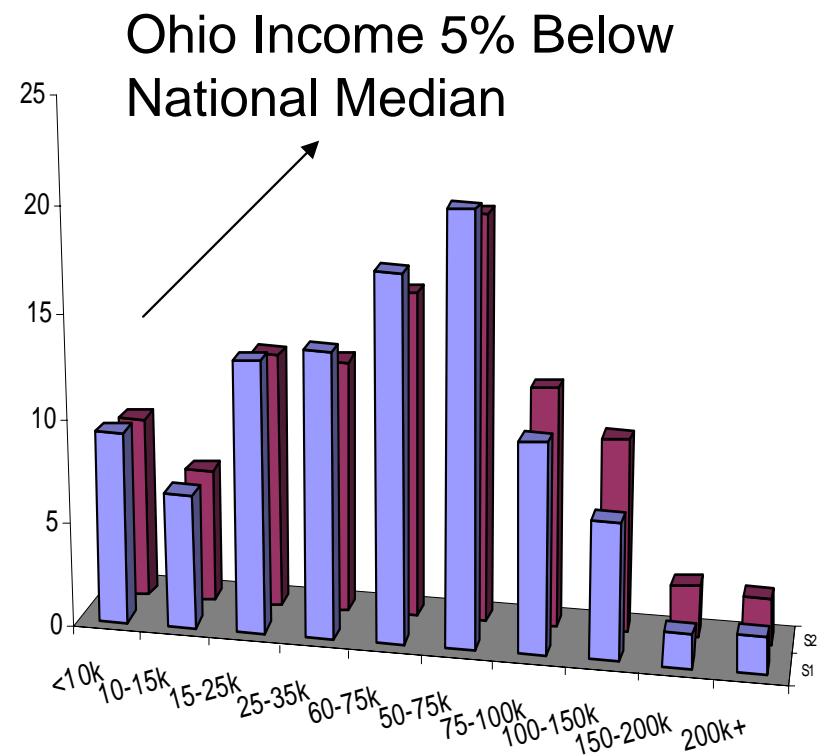
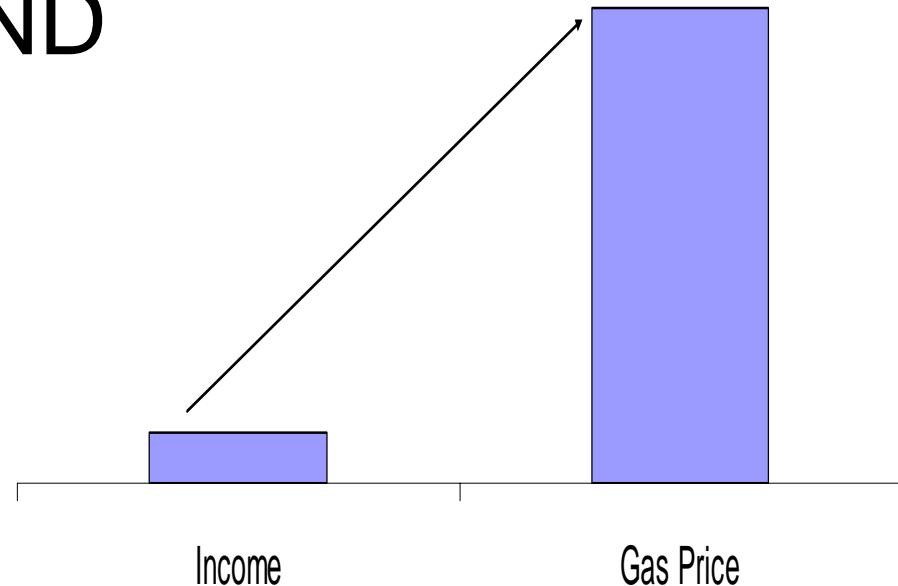
The cost of living for an American family consists of many components. The two largest are housing and transportation. Housing affordability is most commonly understood as the extent to which a household's income can cover the purchase price of a home. However, the traditional definition of housing affordability may be too limited. The cost of transportation, while not currently factored in to the affordability equation, has become increasingly central to family budgets, given their choices to live

Key Findings and Messages— Flying Blind, Exposed and Slipping

- Ohio's transportation policy priorities need to better serve the needs of the state's people, communities and regions
- Rising energy prices are draining billions from each region's economy
- The state can no longer afford just accommodate growth in traffic
- Transportation now costs working families more than shelter
- The state can partner with local governments and private sector to leverage its scarce resources
- Increased travel efficiency can boost disposable income by 10 to 20 percent tax free
- The marketplace will reward this with increased investment and
- These solutions also get Ohio on track to address climate change

Need to Increase Income AND Reduce Cost of Living

- Ohio 2000-2008 Gas Prices Grew 11 Times Faster than Income
- 2000-2008 Gas Price Increase Bled Extra \$13.6 Billion Annually from Ohio
- Transport Grew 23-27% of Income
- Total Statewide Tab >>\$100B
- ODOT Annual Budget Flat @ \$3b
- Total Government Resources <<\$10B



How Does Ohio as a Whole Measure Up— Moody's Economy.com Feb & July 2008 Exposed and Slipping

Strengths

- Healthcare hubs
- Lower business costs than IL & MI
- Inc. diversification in several metros

Forecast Upside

- Emerging tech centers will attract capital, gain momentum

Weaknesses

- *Poor population trends*
- *Reliance on declining manufacturing*
- Continued auto industry restructuring
- Growth not enough to absorb all entrants
- *Columbus barely treading water*

Forecast Downside Risk

- ***Credit crunch undermines household finances and demand for durable goods***
- ***Continued auto industry plant closings in Ohio***
- ***Rising cost of living & loss of relative cost advantage***
- ***Exposure to high gas prices***

Significant Trends We Cannot Avoid

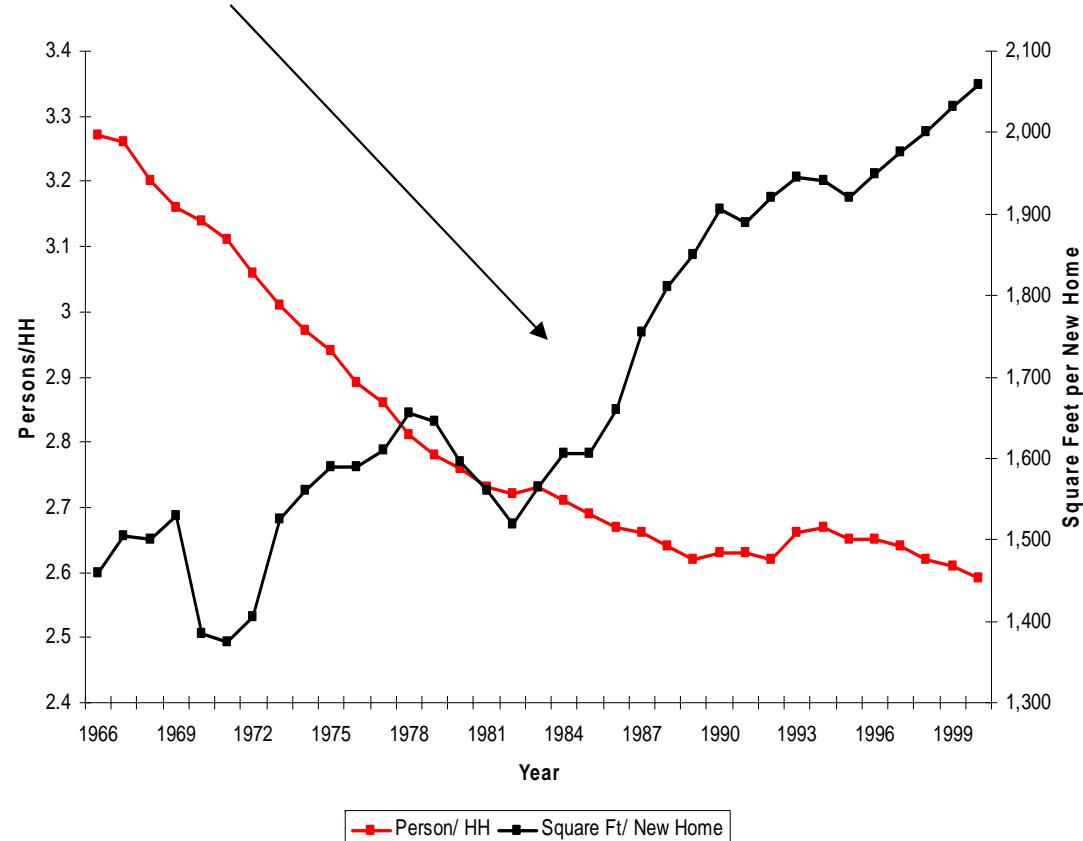
- ***Energy prices—peak oil within 5 and possibly 2 years; today's \$100 oil will rise to between \$177 and 504/barrel as early as 2012***
- Climate change—increased electricity demand, crop cycle disruption, limits on water supplies and shipping season, possible limits on aviation
- Demographics—aging population, smaller households immigration

1960 – 2000

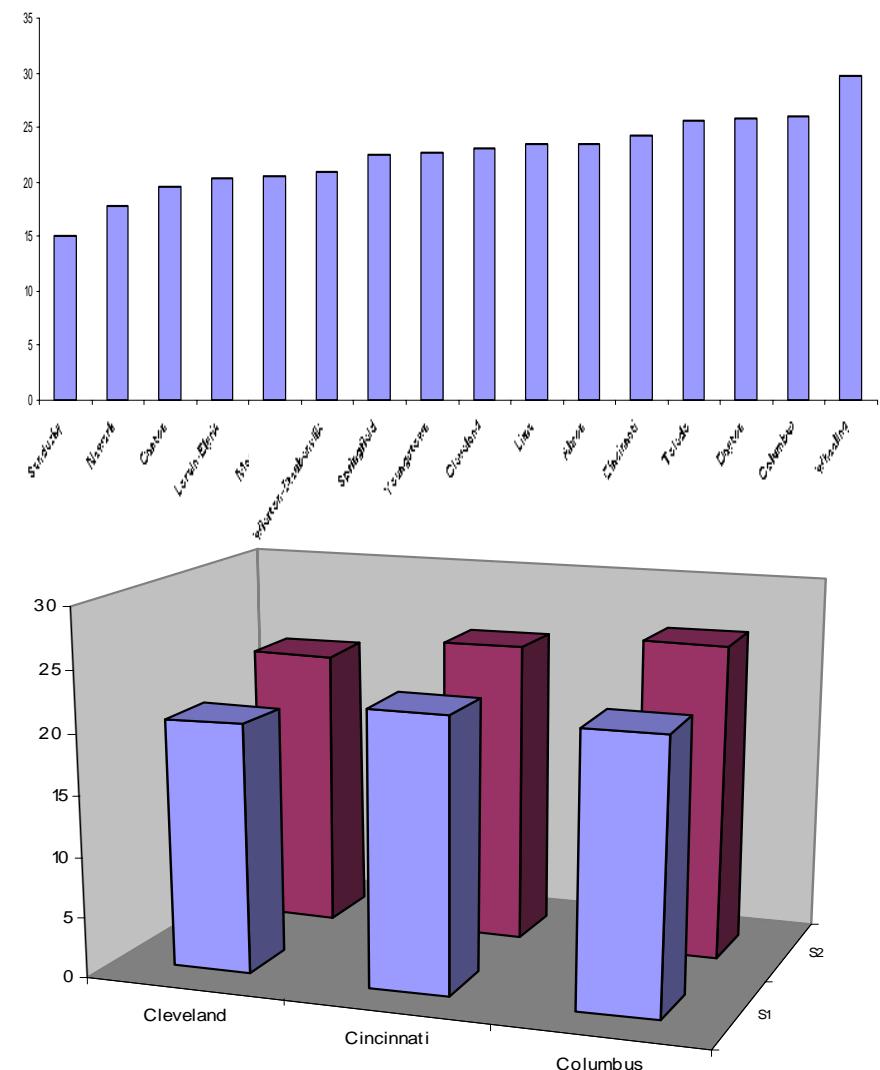
Avg. HH Size in Red

Avg. New Home Size in Black

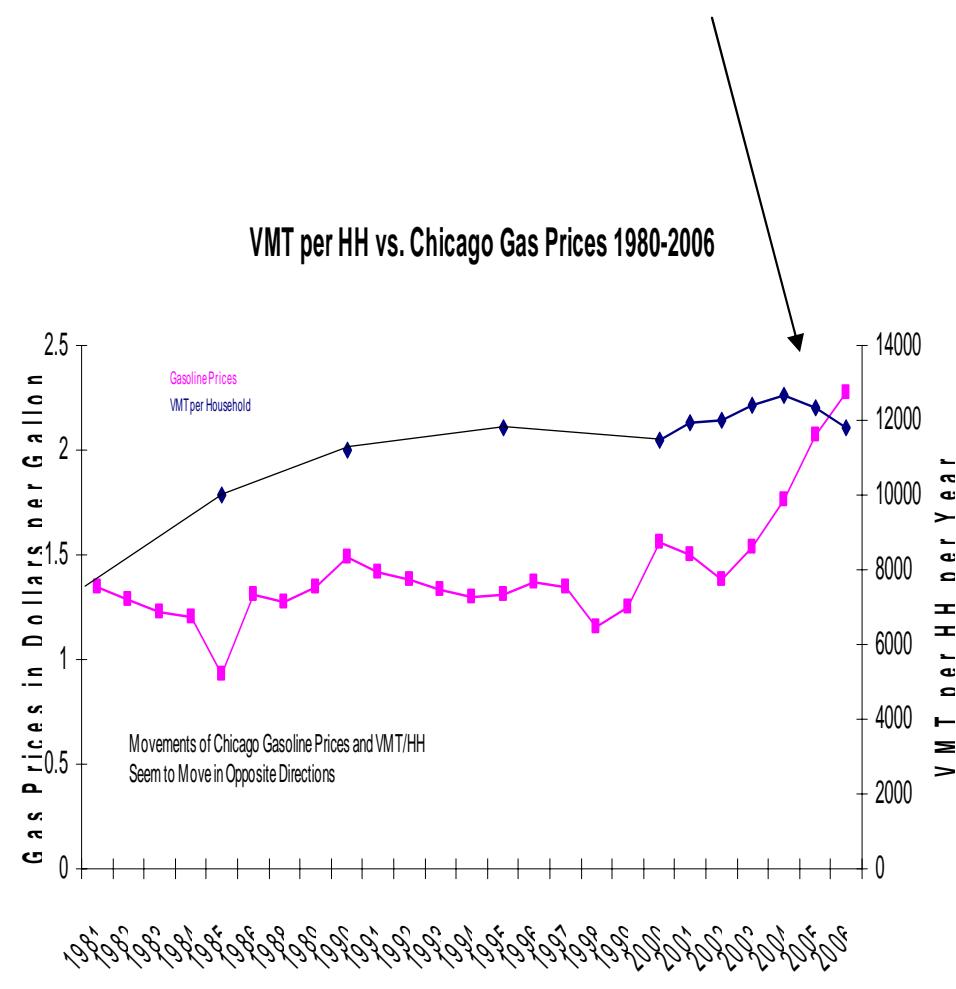
Smaller Households, Larger Homes



Range of Daily VMT/Capita in Ohio Metro Areas—From 15 in Sandusky to 30 in Wheeling—
Average is 24—FHWA 2006



Traditional Revenues Depend on Increased Driving, Flying, Shipping, Traditional Fuels, High Gasoline Consumption—But High Prices Put an End to That



States are trying:

- **New partnerships**--Shifting responsibilities to other levels of government—cities, MPOs, special service, charging impact fees, marginal prices, and TIFs, SSAs, BIDs; also shifting responsibilities by creating new partnerships with passenger and freight rail operators and by privatizing operations
- **Managing assets more efficiently**— life extension, right-sizing, reducing dependence on most expensive system elements
- **Reducing the level of travel demand**-- Coordination between land use and infrastructure planning—NJ ties to city planning to preserve capacity, CA increased sub-allocation to MPOs who tie investment to housing, PA right-sizing cuts road costs in half, use CSS to build faster, better & cheaper;
- **Use transit to reduce VMT**— make use of federal tax credits (\$100/month), MD adds state tax credit, MTC and NJ provide housing incentives near transit
- **Enhancement of traditional and/or tax-based strategies** to increase revenue (gas taxes, truck-weight fees, vehicle fees, or shifts to local sales and property taxes)
- **Innovative financing**— tolls and road-pricing strategies—existing v new capacity, price congestion, charge mileage; debt financing—federal& state credit enhancement; asset leases—P3 and concessions; MA, CA, NJ using bond proceeds to support transit oriented development
- **Flexible use of highway funds**— many states are experimenting with flexibility to directly support streetcar, light rail, bus rapid transit or commuter rail initiatives
- **Leverage federal highway and transit block grants** – use of revenue anticipation bonds (also known as GARVEE bonds) and similar mechanisms.

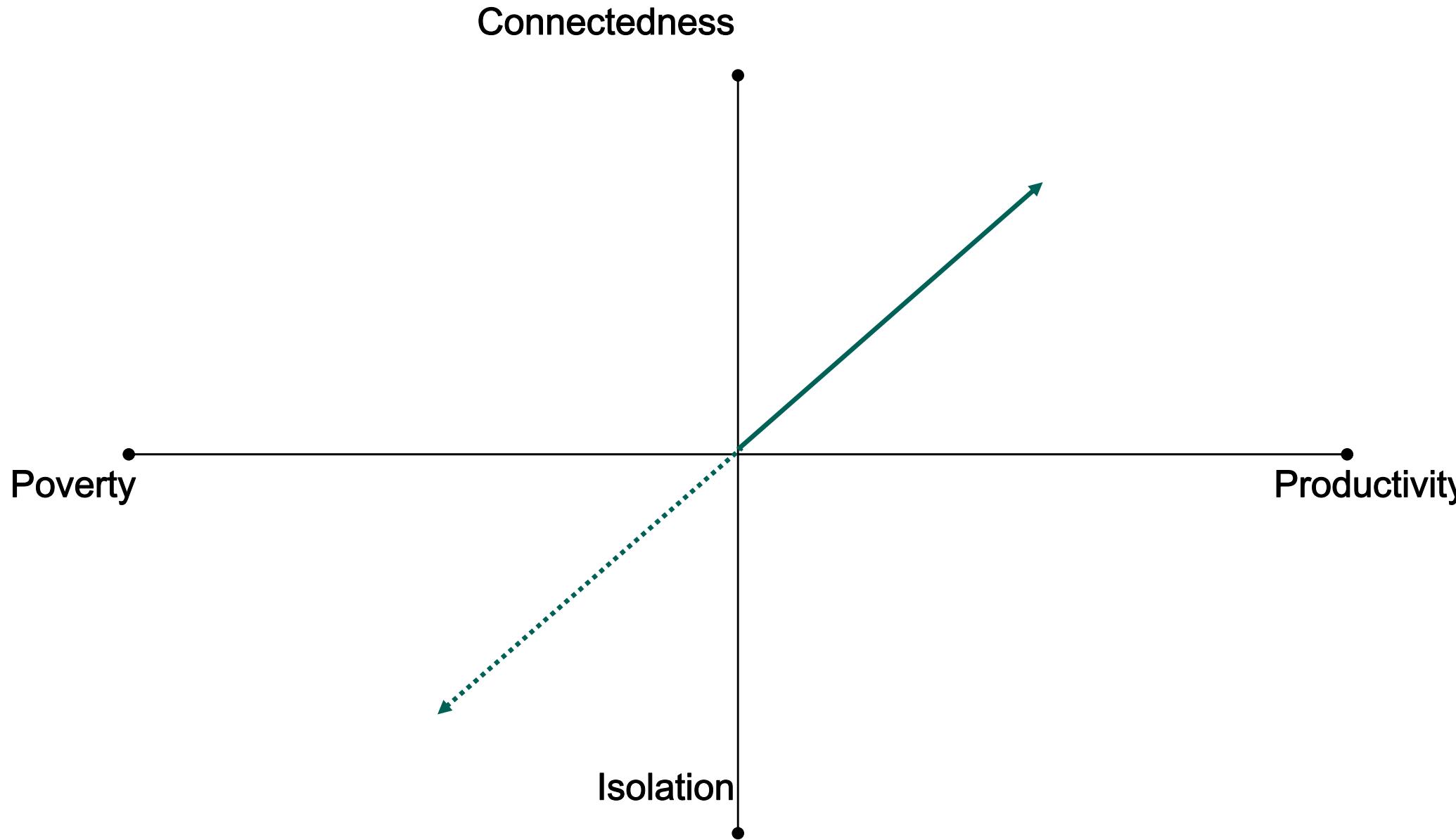
Ohio's Metro and Micropolitan Areas and Cities' Core Assets

- 32 regions with core cities
- Each has an institution of higher education
- Most are regional health care centers
- Most have designated historic districts
- Most have newer industrial districts
- Each originally served by streetcars, inter-urban electric railways and steam railways
- Location efficiency still reflected in basic street patterns and land uses and statewide ROW
- All have significant plans to improve local transportation choices and are looking for investment partners

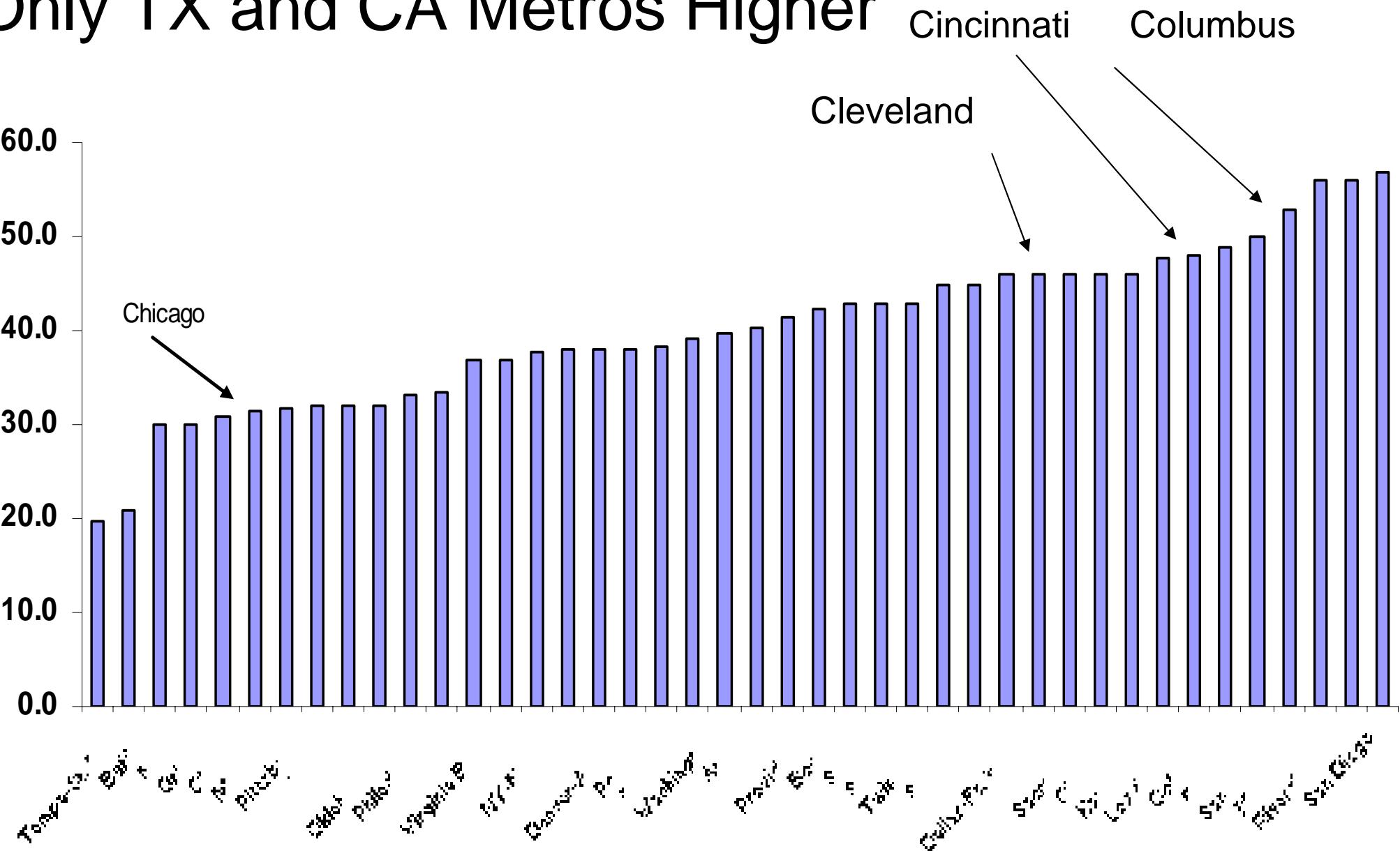
To Catalyze Transformative Infrastructure Initiatives, State Government Should

- Place state transportation programs and policies in the service of regional economic growth and prosperity, and
- Create a 21st Century Transportation Investment Bank to fund transformative, market-shaping investments

What a Nourishing Economy Does— Reduces Risk, Increases Gain

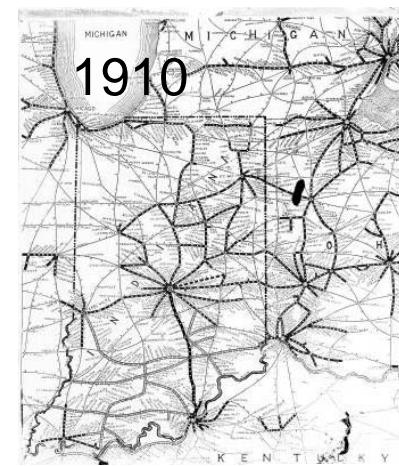


Past Policies Bypassed the Local Economy— Portion of Daily Traffic Traveling Freeways Only TX and CA Metros Higher



Historical Precedent for Rapid Change— From 1885 to 1902

- America went from 1 electric street railway to 1 in every city of 5,000
- Rate of growth = to the Internet
- Demand boosted by important social movements—e.g. home economics
- Ohio had the best electric street railway coverage nationally
- Columbus, Cleveland, Cincinnati, Dayton, Toledo, Akron, Youngstown...
- Alliance, Ashtabula, Chillicothe, Coshocton, E. Liverpool, Hamilton, Lima, Lorain, Mansfield, Norwalk, Sandusky, Springfield, Xenia, Zanesville...
- Thousands of miles of local and inter-urban connecting in turn to the national inter-city rail networks



Columbus
Broad & High
1912



Getting to scale through network economies—when a large number of connected small investments are worth more than a few big ones

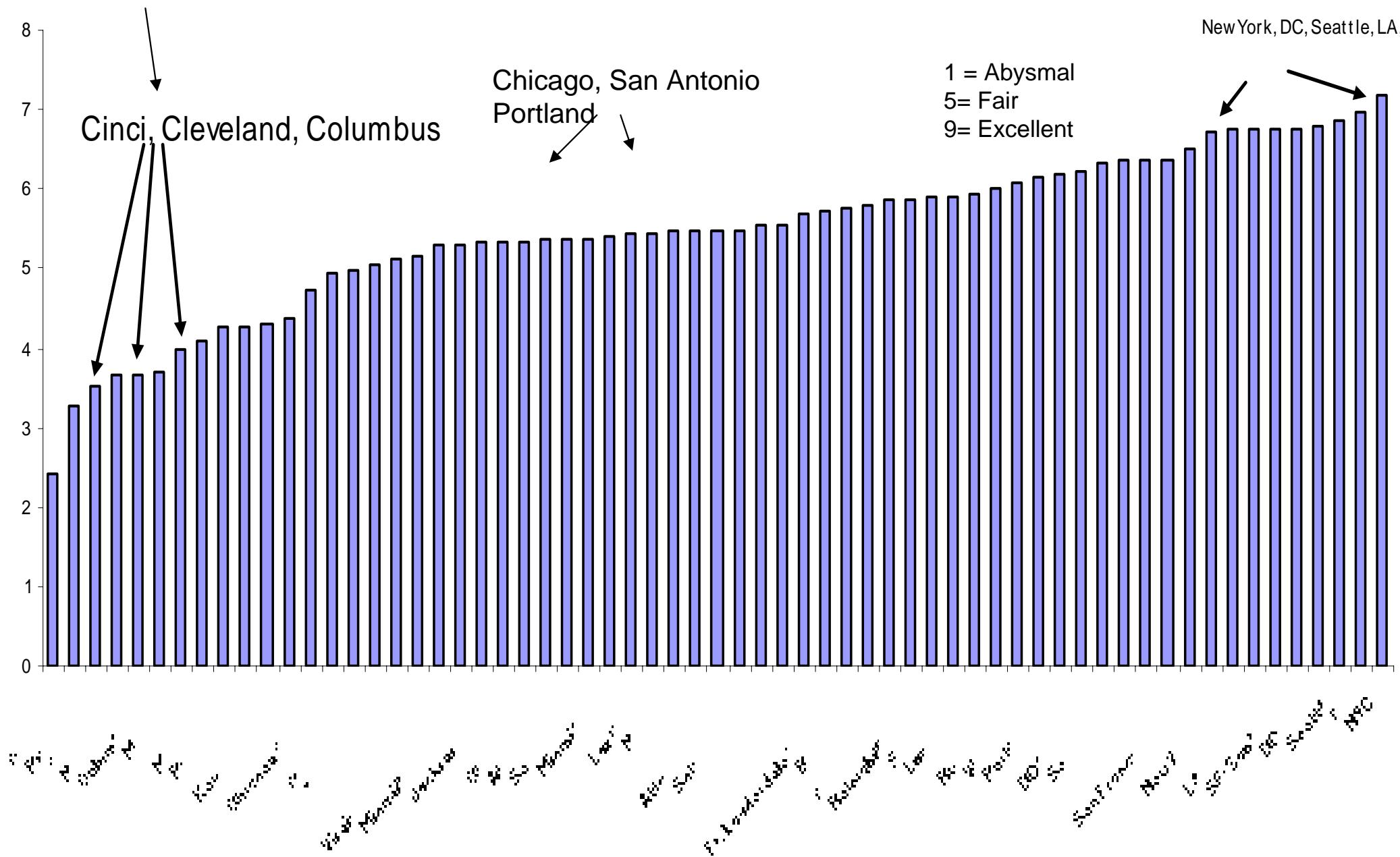
Most Places Abandoned Their Transit Systems



And Public Policy
Favored
A Different Vision



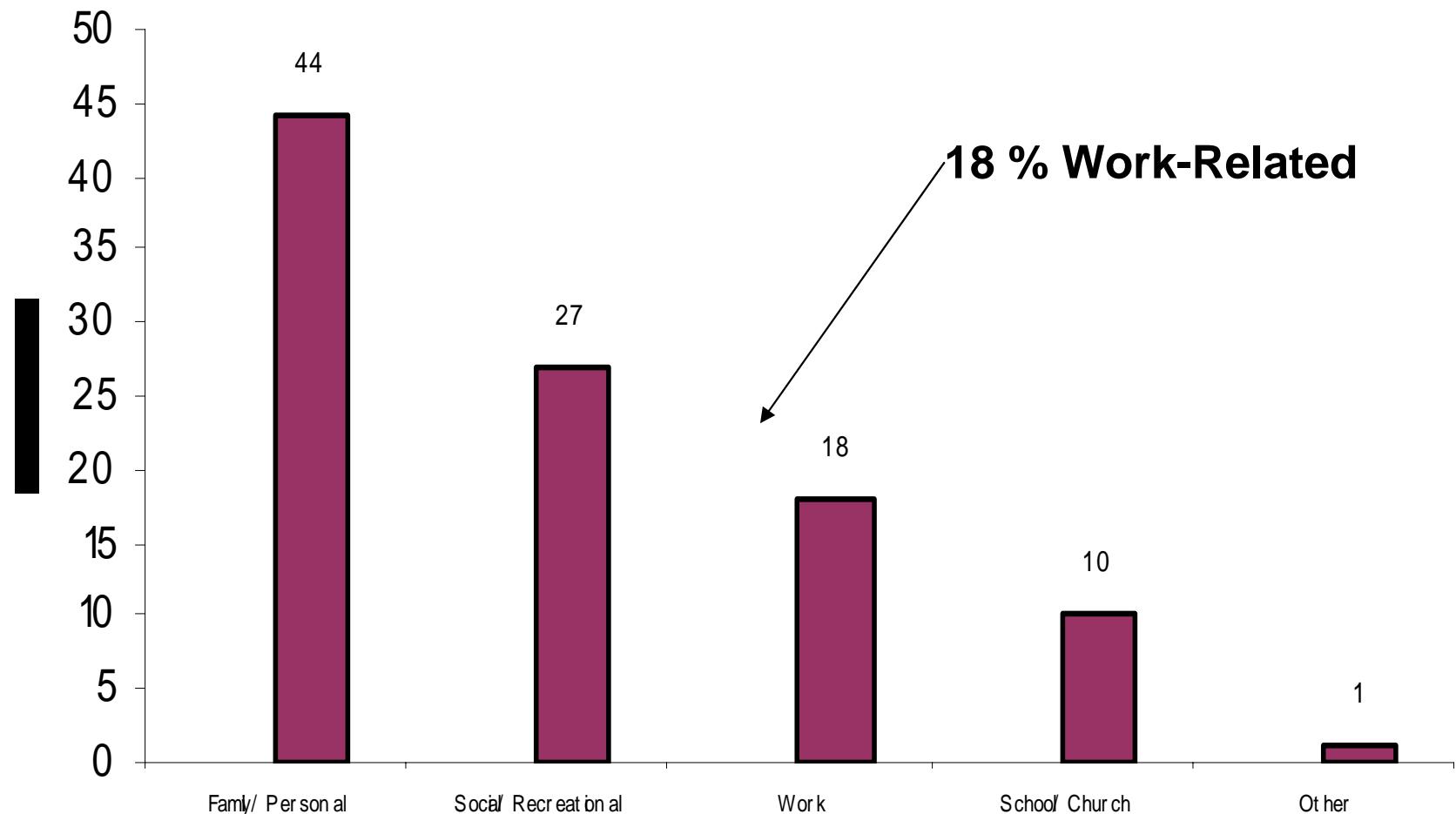
How the Market Views Ohio—PWC/ULI 2008 Commercial/MF Development Prospects Ratings



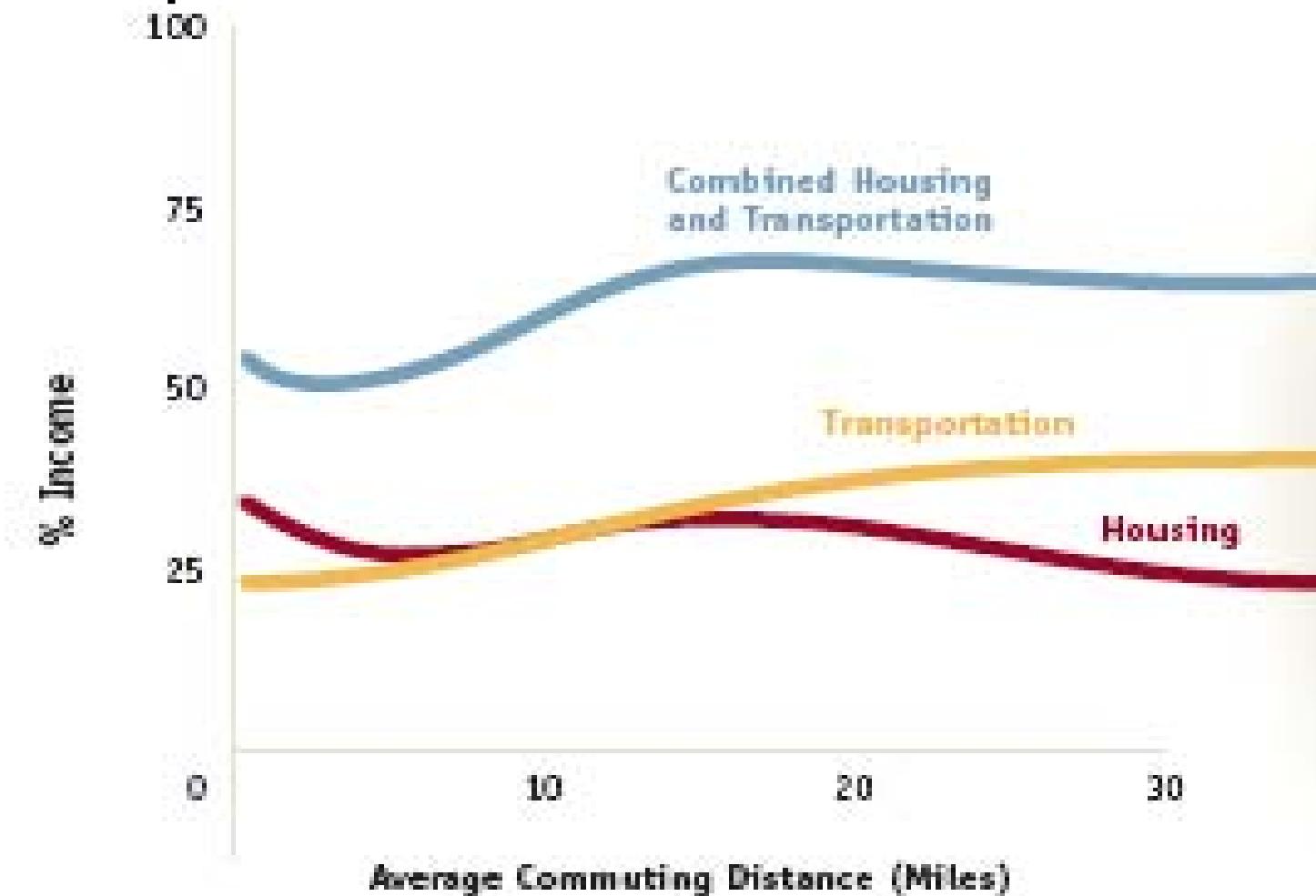
Declining Importance of Journey to Work

Most Passenger Trips are Short Trips for Non-Work But Policy is Mostly About Commuting

Limits Support for Bringing Jobs to People



Drive Until You Qualify Market Means
Where We Build Matters:
Poor Locations Drive Up Emissions and Costs
Working Families in Ohio Spend 2/3 Income
on Housing + Transportation



Cleveland MSA Showing Impact of 2000 versus 2008 Gas Prices

Htaiindex.cnt.org

Annual Household Gasoline Expenditures - 2008.

by Block Group Model Data

■ Data not available

■ 0 to 1,600 UDS(\$)

■ 1,600 to 2,400 UDS(\$)

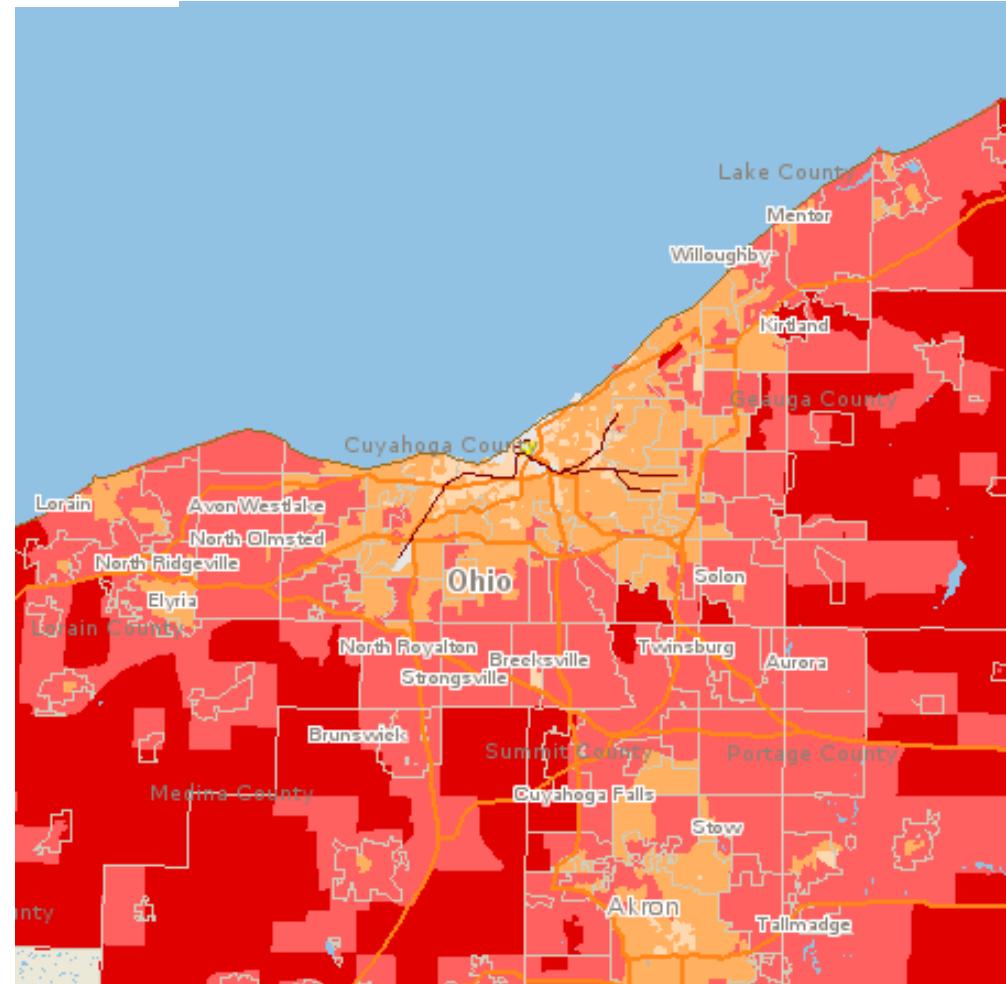
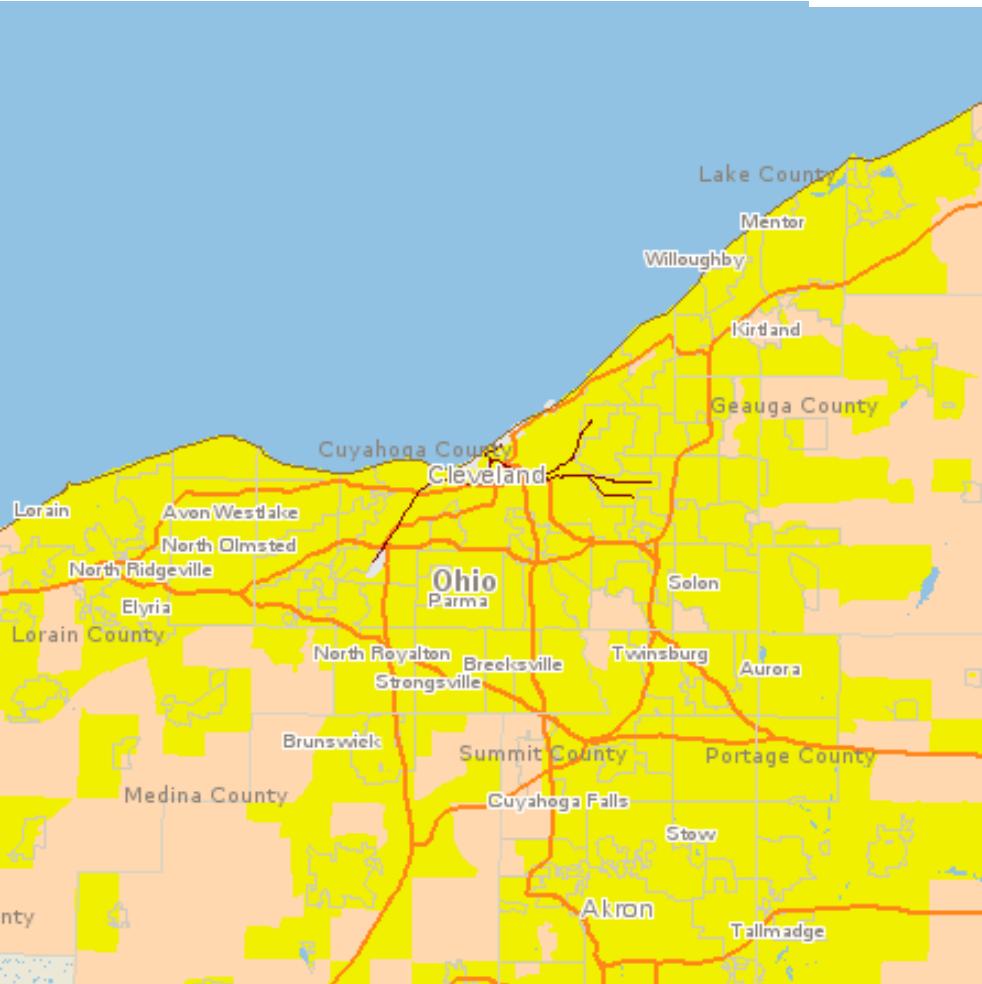
■ 2,400 to 3,000 UDS(\$)

■ 3,000 to 3,800 UDS(\$)

■ Greater than or Equal to 3,800 UDS(\$)

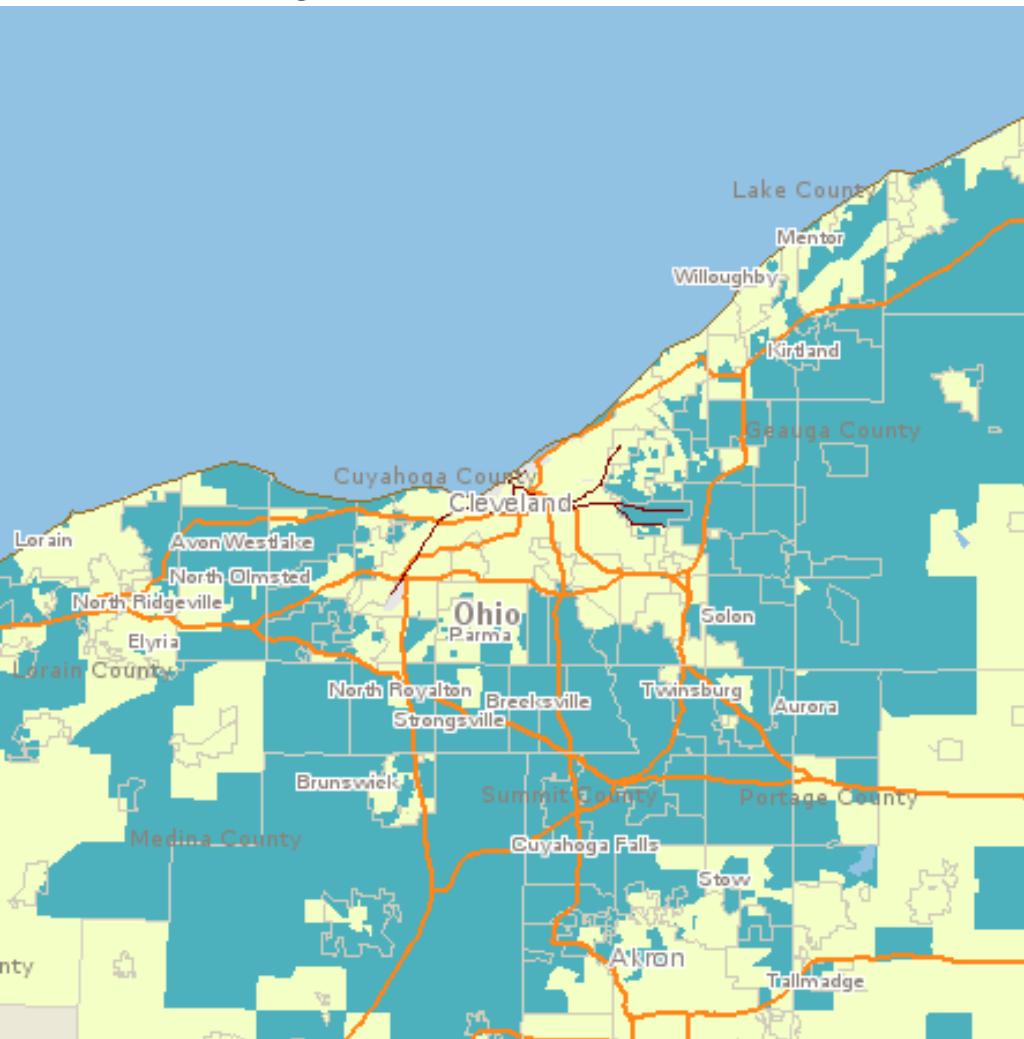
\$533-\$2205/year at \$1.66/gallon

\$1341-\$5304/year at \$4.03/gallon

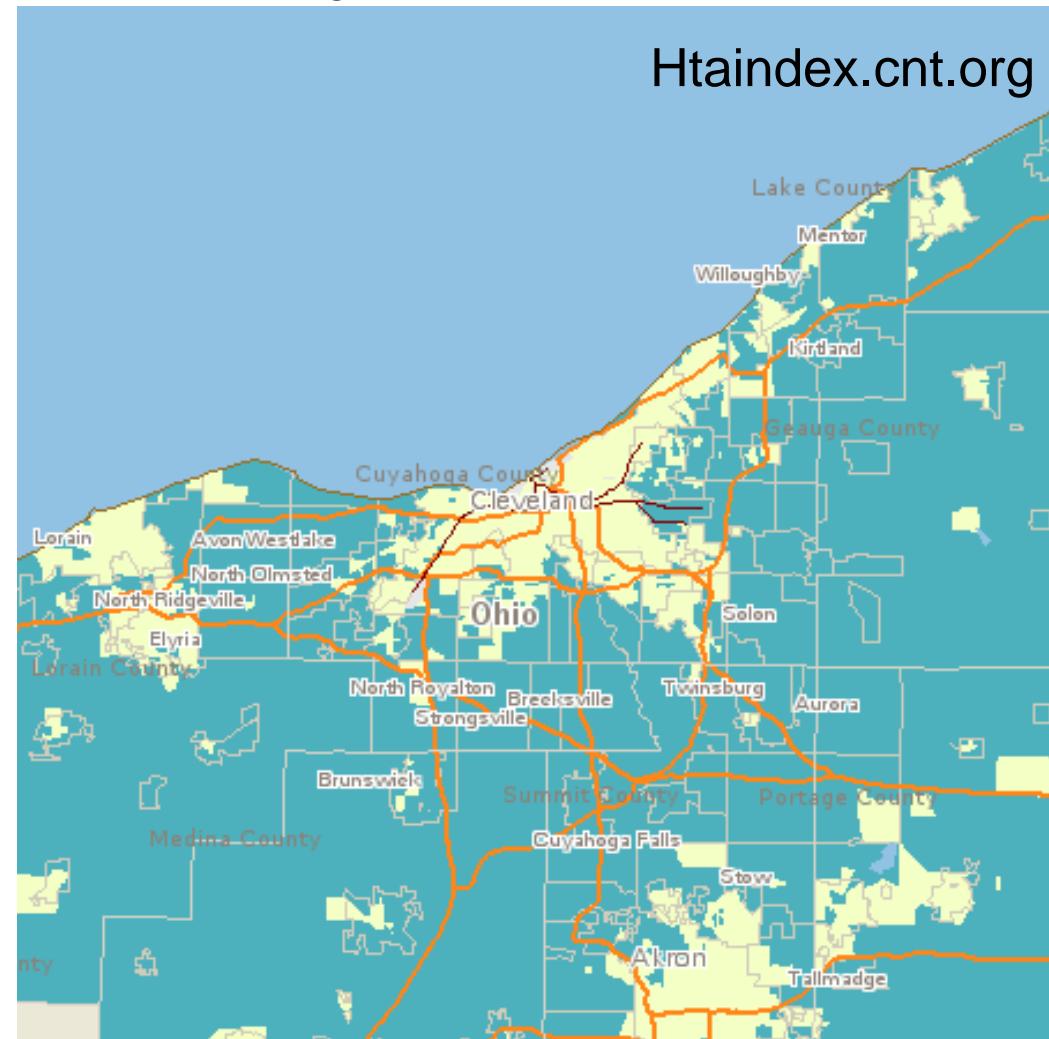


Where is the Affordable Housing in Cleveland: Showing Break at 30 Percent of AMI for Housing, 48 for H+T

Housing Costs at 30% of Income



Housing+ Trans Costs at 48%



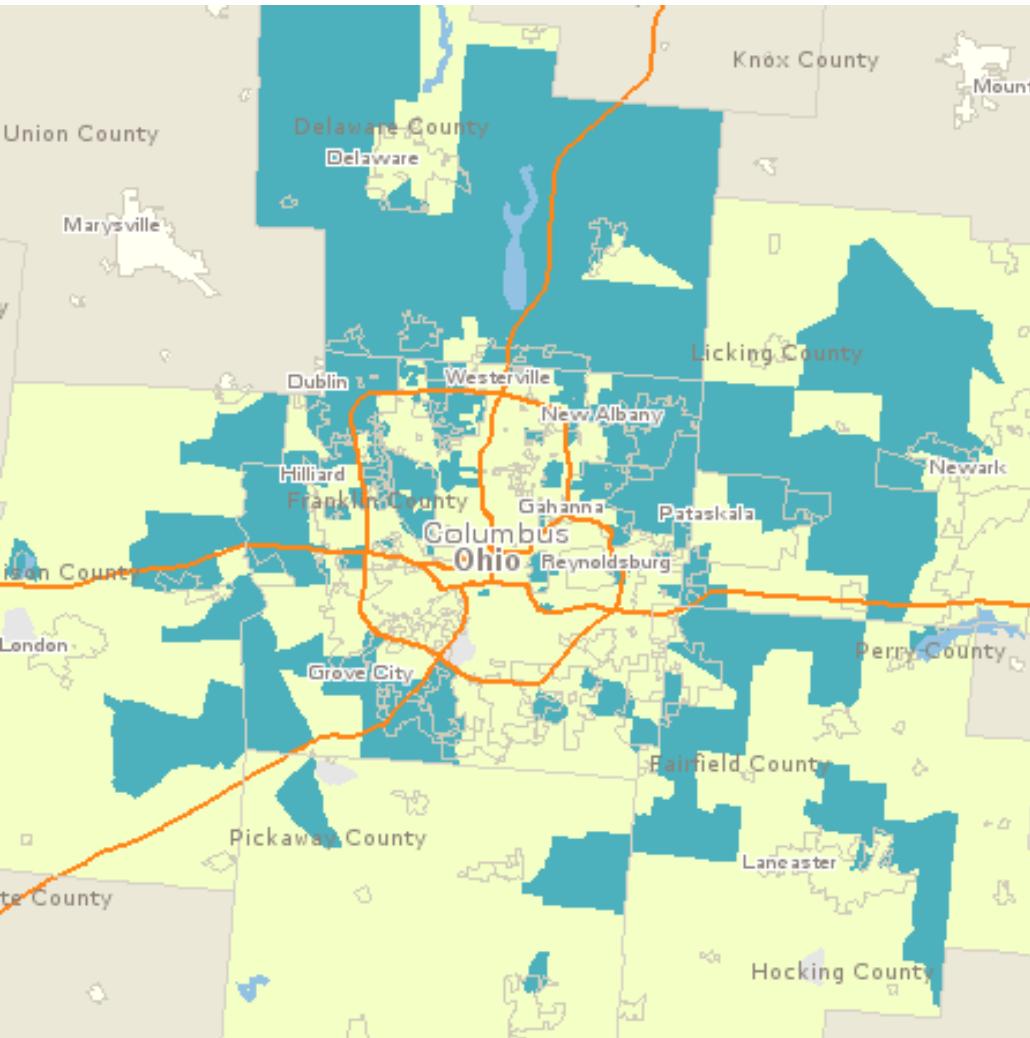
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Same View, Columbus

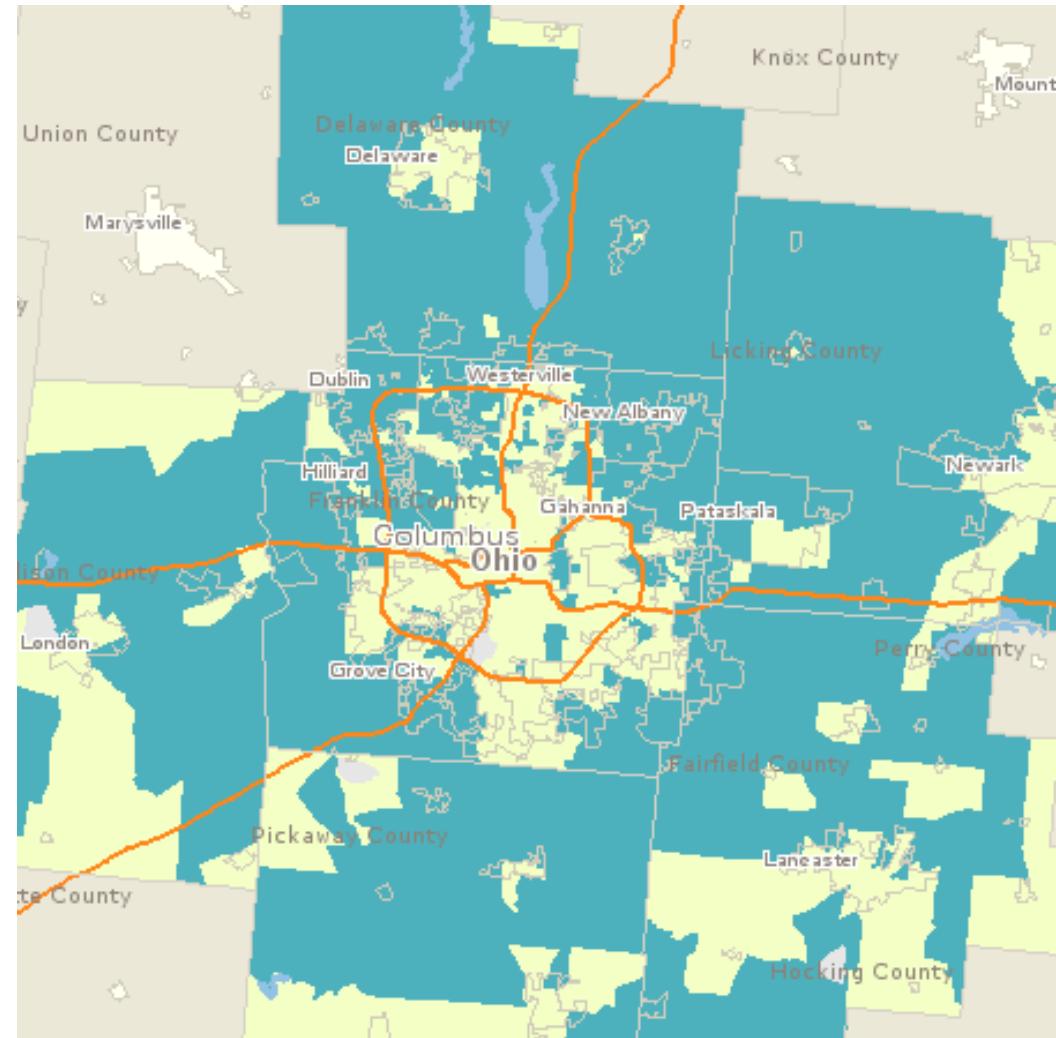
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Housing at 30% of Income



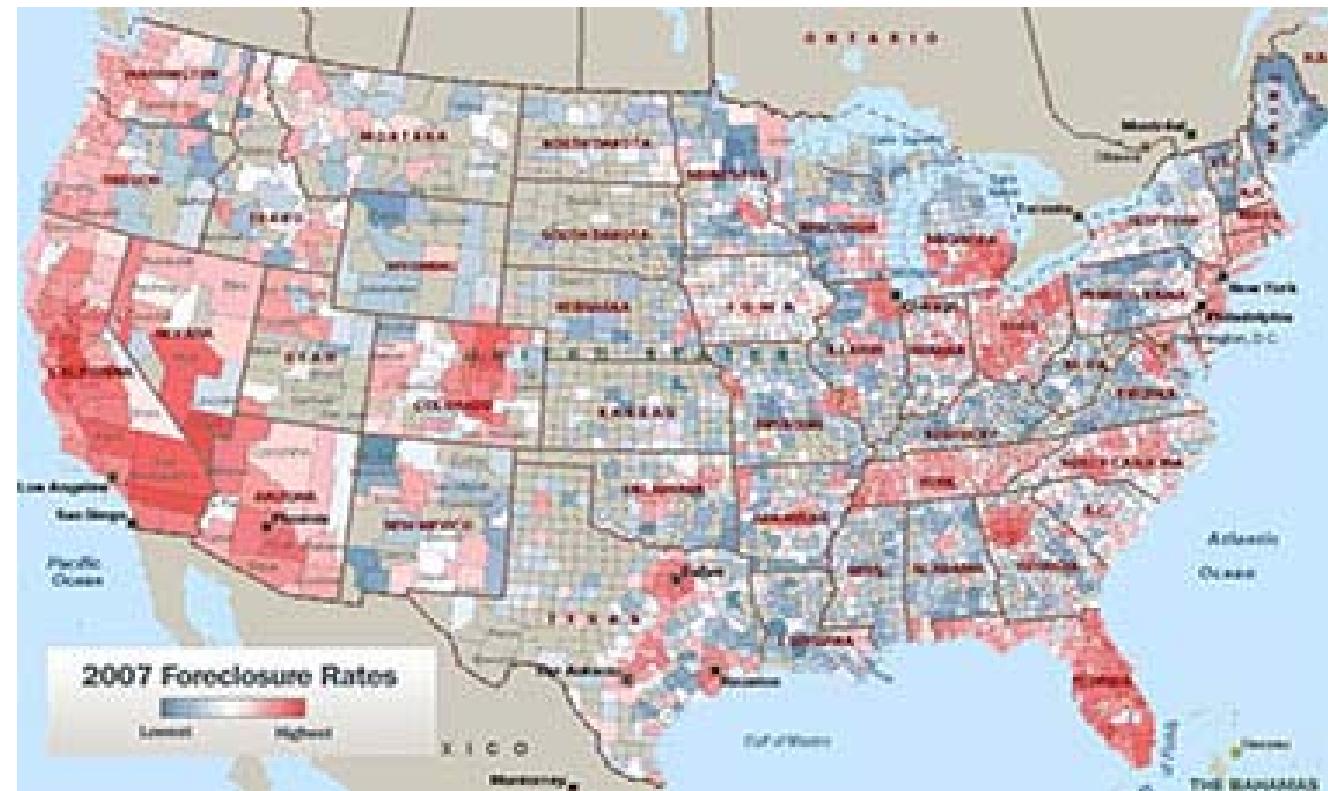
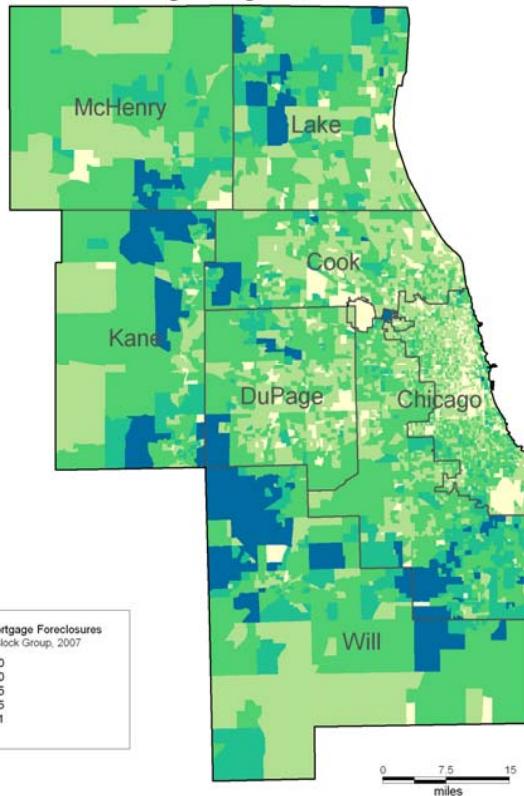
Housing + Transportation at 48%



It's Not Over Yet—

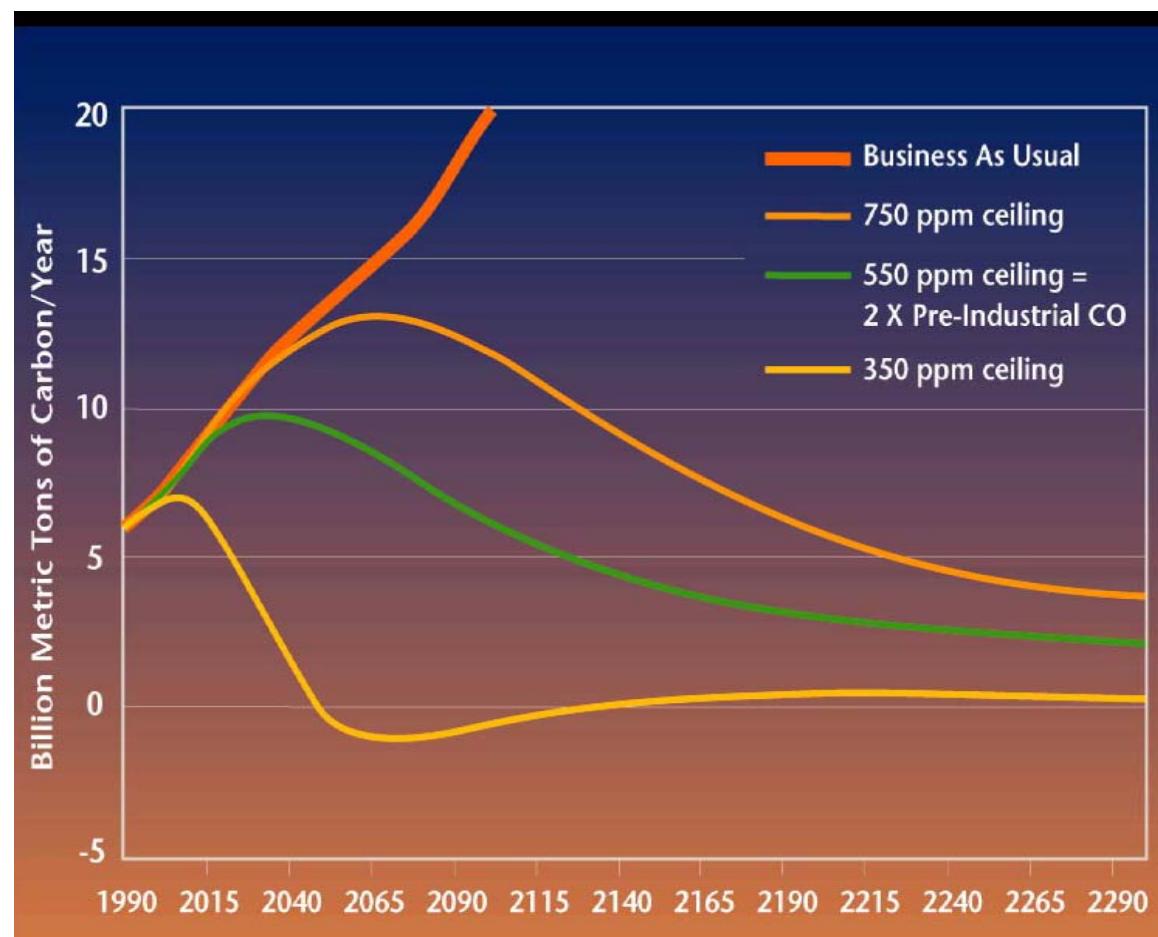
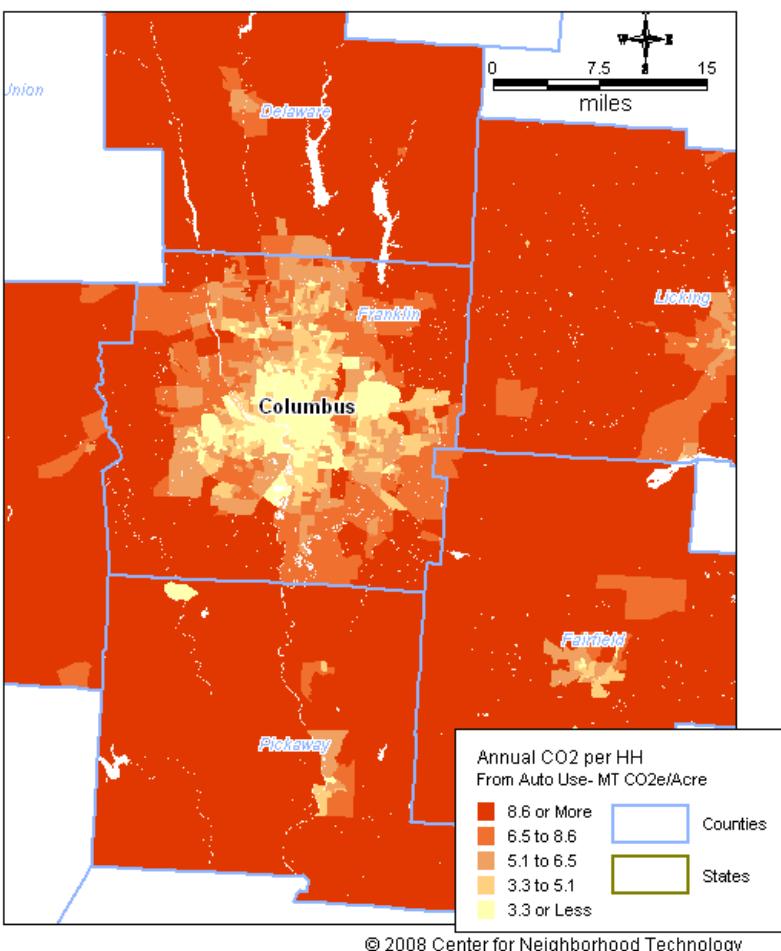
- Gas Costs Keep Climbing,
- 12 month's foreclosures
Up 5% in Cook County IL
- Up 70% in surrounding collar counties
- Worst where income is low & VMT exposure is high*

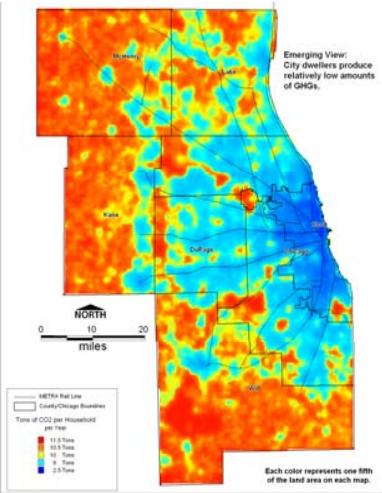
Recent Residential Mortgage Foreclosures
Chicago Region, 2007



No Time to Waste

- Climate protection is a very heavy lift
- Will require both technical and social ingenuity
- “No Ton Left Behind”
- Done right, it’s not a cost, it’s an investment that pays permanently





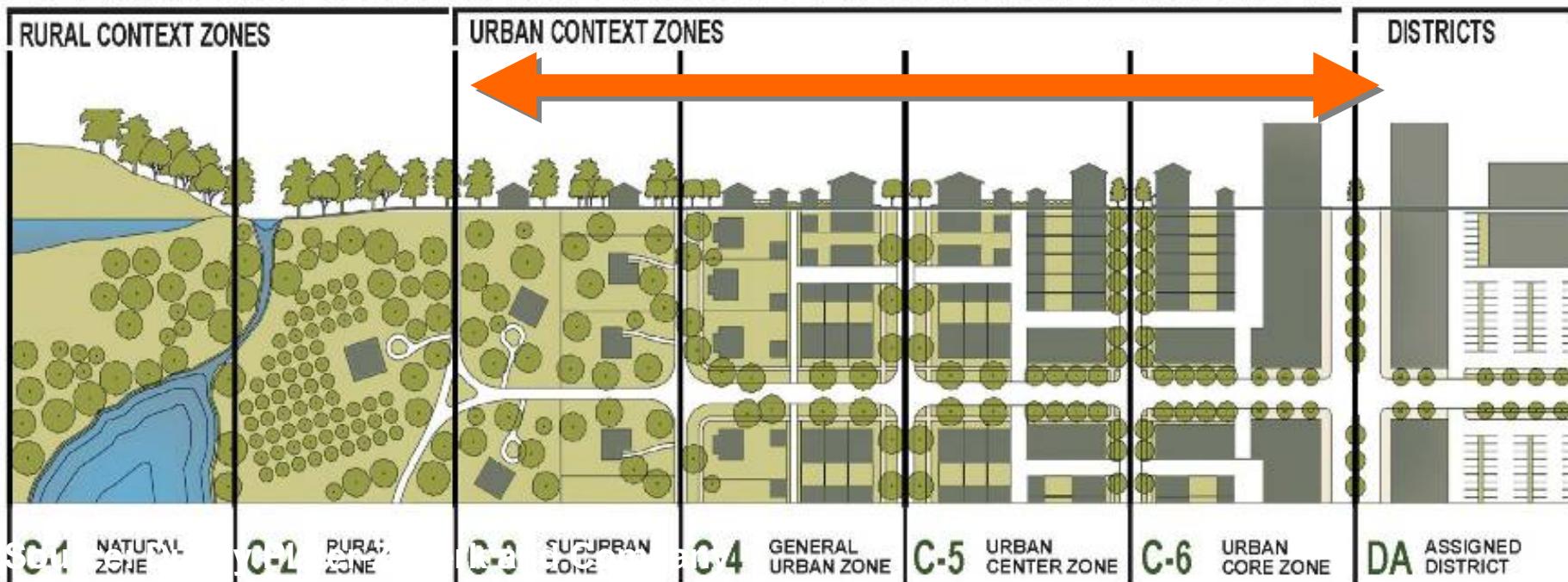
9.7-
14.6

Convenient Solution to an Inconvenient Truth

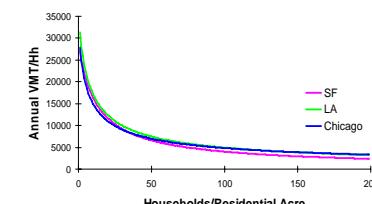


This Place Has
the
Disappearing
Carbon
Blues...♪

RURAL TRANSECT URBAN



Location Efficiency & the Transect Reveals Carbon Benefits of Good Urban Form



Making Transport Costs Count in Foreclosure Prevention



Take the
T
Home
Mortgage
Program

NOW IT'S EASIER
TO OWN YOUR
OWN HOME!



Introducing the
**Location Efficient
Mortgage**® (LEM)



Seattle METRO
Fannie Mae
Seattle Housing
HomeStreet Bank

- LEM's in Seattle, Chicago, San Francisco, and Los Angeles (Fannie Mae and local lenders)
- Smart Commute Mortgages in several dozen cities (Fannie Mae plus local lenders)—Columbus
- Targeted Counseling in Oakland, Chicago and Seattle
- *Tie foreclosure prevention to travel reduction in new State initiatives*

Improve your commute — buy a house.



**Your dream of home ownership
can become reality.**

Announcing the arrival of the Location Efficient Mortgage in your neighborhood. If you live and work in Seattle, you may qualify for a lower down payment, a discounted annual Metro Transit pass and a free membership to the Flexcar program. You'll look at commuting in a whole new light.

Make a move into your future.

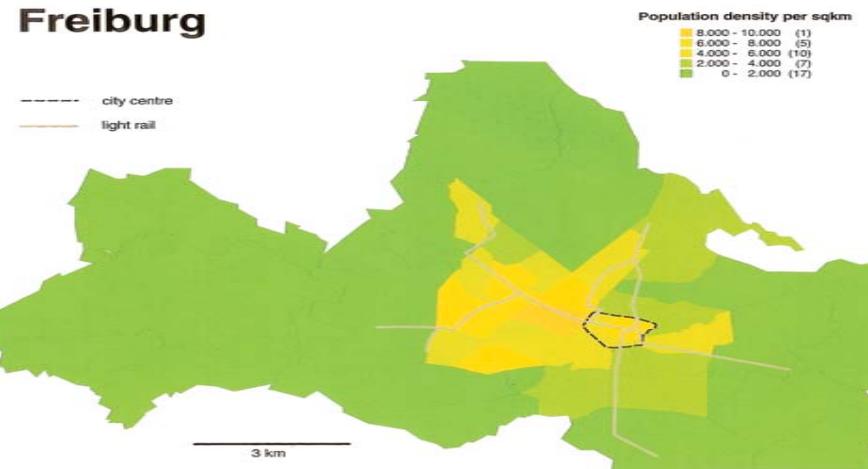
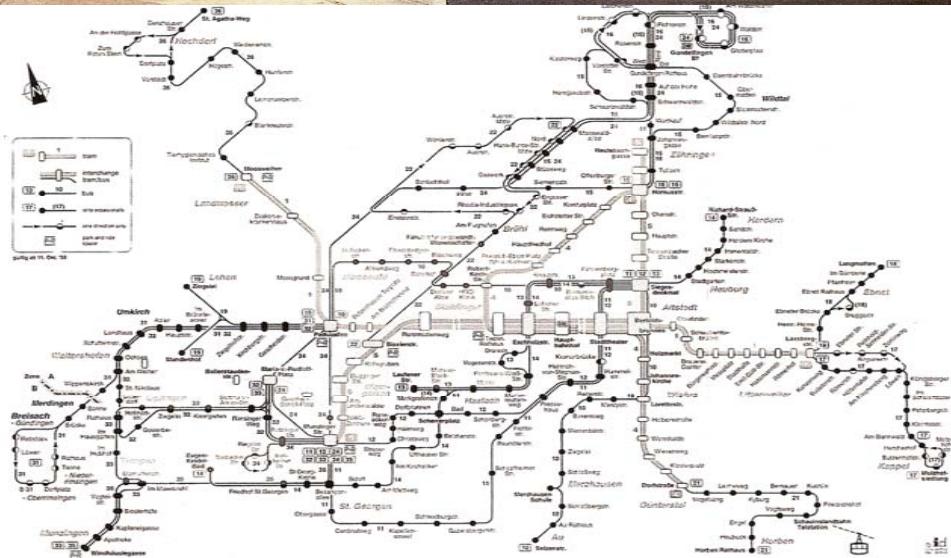
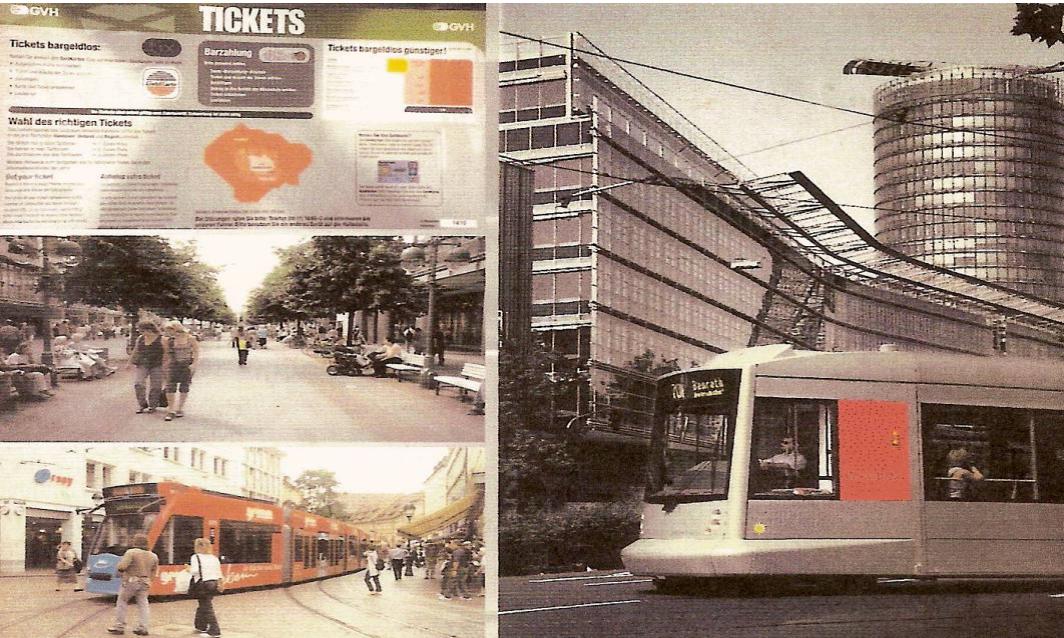
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Smart Grid + Electric Traction Corridors could change market for electric transportation

- PHEVs in 2010
- Micro-grids soon
- Wind-electric now
- New shared infrastructure arrangements with utilities
- Customers and communities paid for demand shaping-now
- Federal interest declared in supporting



Works in Small Areas: Freiburg Germany—Modest Density + Good Coverage + Ease of Use =Low Car Use + Affordability



Dresden Freight Trams



Make All Downtown and Activity Center Investment Transit-Based Sample Larger Scale Mission Bay SF

- Note 3d Street F Line Streetcar runs down the center 2008
- Grid-connected, mixed use
- 32% Affordable Hsg
- Allows 1 car or less zoning
- Minimizes unnecessary parking



Filling In Missing Links by Adding Streetcar Circulation—Mixed Use/Mixed Income Reduced Portland VMT & Transport Carbon 67% Part of Portland Climate Plan (From Street Smart, CTOD 2006)



STREETCARS ARE DEVELOPMENT-ORIENTED TRANSIT



DEVELOPERS SAY THAT the permanence of the fixed guideway helps mitigate the risk, and the higher densities and lower parking ratios typically permitted in downtowns make projects more profitable. These densities would not be possible, however, if there was no streetcar. Before the alignment was selected for the Portland streetcar land in the Pearl only captured 19 percent of all development in the CBD; after it was chosen the land captured 55 percent.

	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

TABLE 1:
Private Returns
on the Public
Investment



Kenosha WI—
State DOT Paying for
Expansion



Oregon
Governor
Kulongonski
At Recent
Streetcar
Opening

Reconnecting = Accelerated Value from Urbanizing Limited Access Roads

- Milwaukee Lakefront Highway Teardown
Increased Property Value Twice Downtown Rate
- Similar or Better Rates in Portland, NYC, SF & Planned Seattle, Buffalo, others
- Cleveland W. Shoreway, Akron, Columbus Expanded Lid

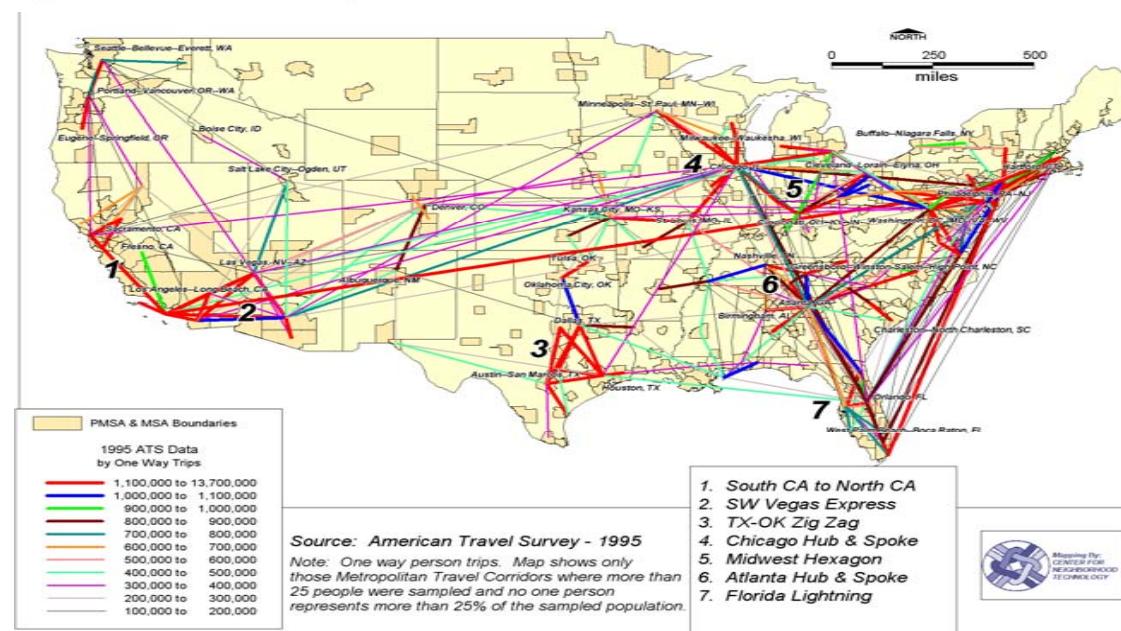
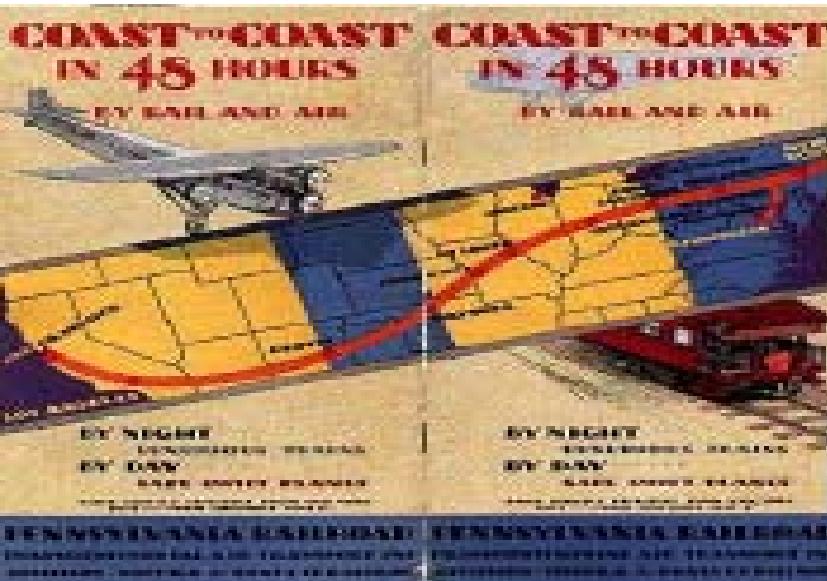
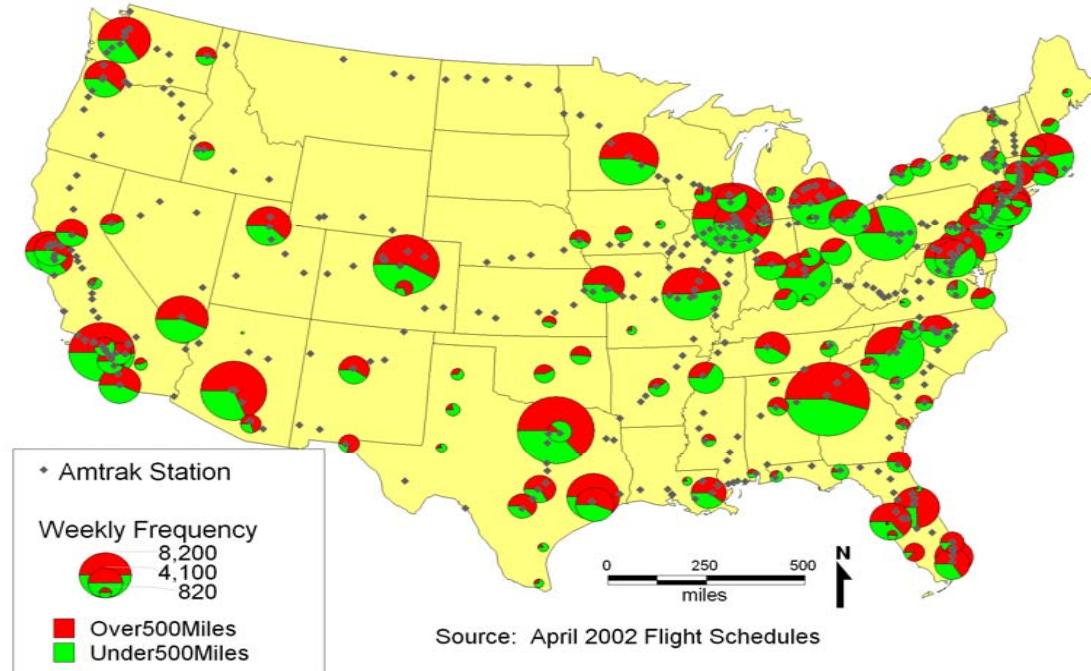
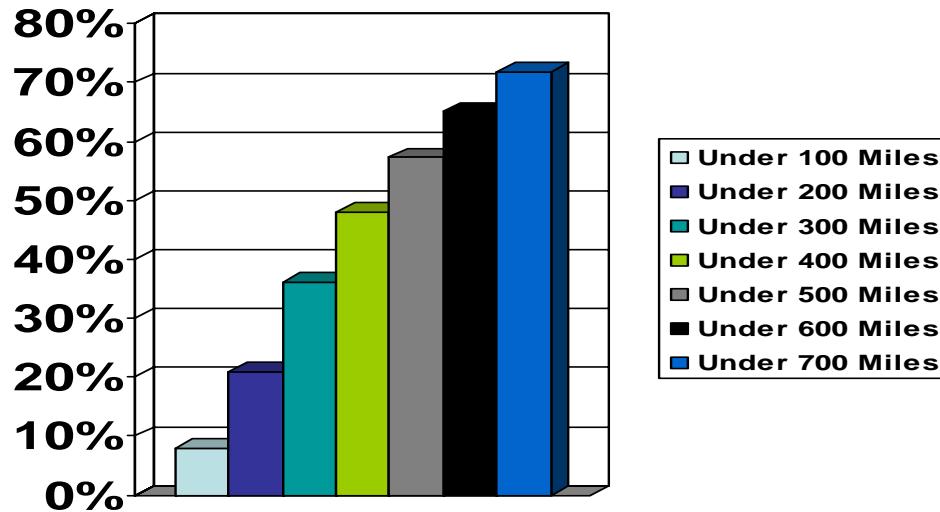


New kinds of services in Ohio Partner to bring to large scale

- Car sharing
- Van pooling
- Transit benefit marketing
- Half of members sell a car
- Takes 17 cars off road for each one offered
- Pilot programs in place in Columbus and Cleveland



Inter-City Travel is Both Long Distance and Short Distance Between Metro Areas



The Fences are Coming Down— Airports Become 2d Downtowns or Travelports

 **AIRTRAIN NEWARK**

Connecting Transportation AirTrain News AirTrain History Gallery

Connecting Transportation

What is AirTrain Newark?

Travel Times

How Much Does it Cost?

Airline Services

Feedback

Your Easy Airport Connection



AirTrain Newark was developed by The Port Authority of New York & New Jersey as a much-needed solution to highway and airport roadway congestion. It's part of the Port Authority's \$15 billion airport investment plan that includes state-of-the-art terminals, upgraded retail and dining facilities, improved transportation options to and from the airports, and thousands of new parking spaces. These innovations are designed to bring you a world-class travel experience.

You can access AirTrain Newark by taking any NJ TRANSIT or Amtrak train that stops at Newark International Airport Station. PATH riders can access AirTrain Newark by taking NJ TRANSIT from Newark Penn Station. AirTrain Newark gets you from Newark International Airport Station to your terminal-and a short distance from your departure gate-in just minutes.

 <http://www.njtransit.com> 1.800.626.RIDE

 <http://www.pathrail.com> 1.800.234.7284

 <http://www.amtrak.com> 1.800.USA.RAIL

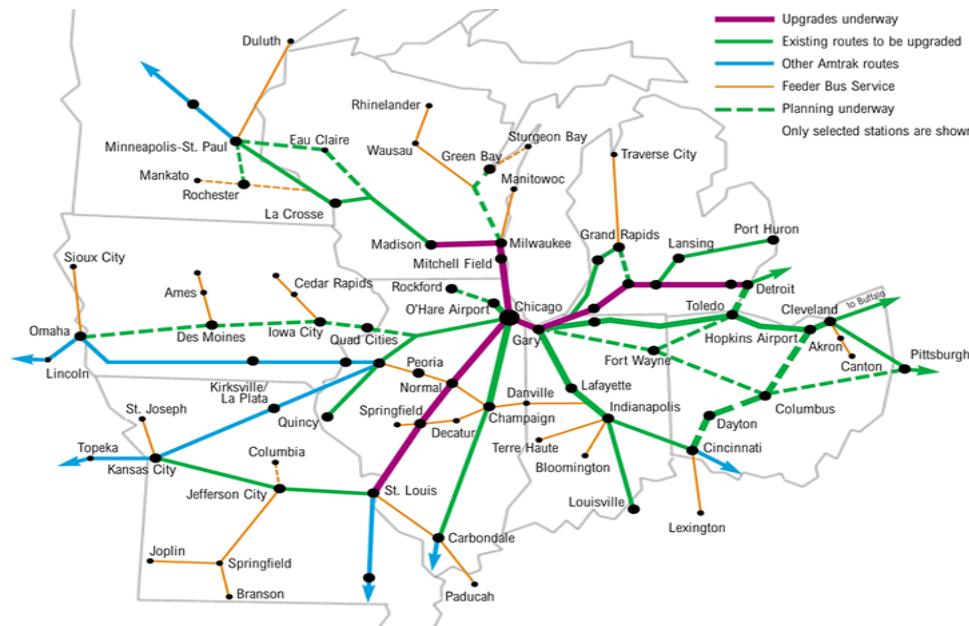

THE PORT AUTHORITY OF NEW YORK & NEW JERSEY



Capture The Benefits of Intercity Rail

Current 3 C's Corridor
90% Motor Vehicle,
10 % Aviation

Create Ohio Hub
12 Daily Rail Round-Trips
Changes to 50 to 60 % by Rail



Ohio Could Be Leveraging:

- Current initiatives—Build Ohio Jobs, Energy-Jobs-Progress, Passenger Rail Initiative
- Experiment with flexibility—increase sub-allocation in exchange for new local revenue
- Encourage local ballot initiatives & other forms of participation
- Build better capacity at regional level
- Use 100 percent CMAQ shares, as opposed to the traditional 80 percent federal shares, to jump-start local transit investments—Cleveland, Dayton, Columbus, Cincinnati, a change that was specifically enabled in the Energy Policy Act of 2007, passed in December 2007
- Examine purchase of service agreements for provision of mass transportation, and explore using these to finance against revenues to be pledged revenues in inter-city and regional transit corridors by employers and cities

Thank You!



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