

WHY STREETCARS AND WHY NOW?

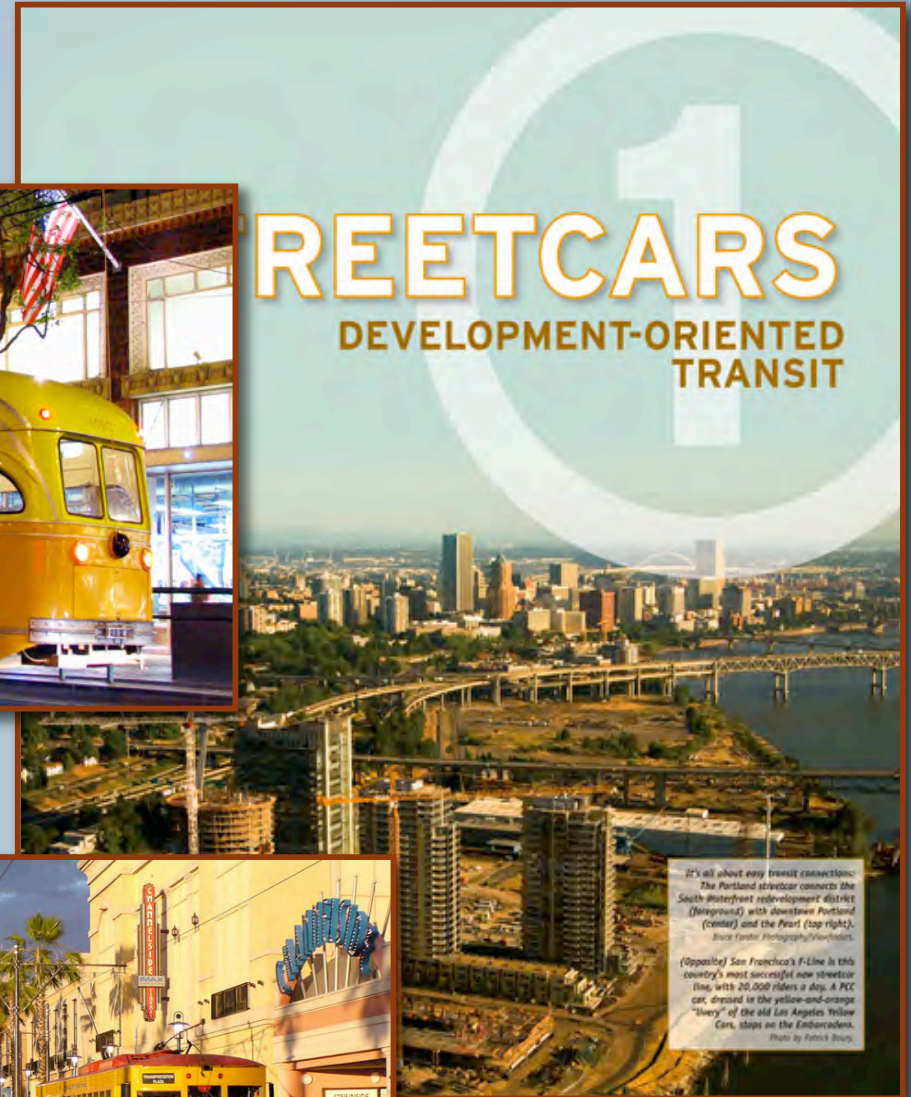
RECONNECTING AMERICA

STREET SMART WORKSHOP #3
CHARLOTTE, NC, OCT. 11, 2007



WHY STREETCARS? BECAUSE THEY:

- *serve renaissance in downtowns*
- *relatively inexpensive*
- *focus and shape development*
- *enable higher densities, lower parking ratios*
- *make development more profitable*
- *easily integrated into built environments*
- *are faster to build*
- *boost transit ridership*
- *promote walkability and vibrant streetlife*



It's all about easy transit connections:
The Portland streetcar connects the South Waterfront redevelopment district (foreground) with downtown Portland (center) and the Pearl (top right).
Bluebird Photography/PhotoHub

(Opposite) San Francisco's F-Line is this country's most successful new streetcar line, with 20,000 riders a day. A PCC car, dressed in the yellow-and-orange "livery" of the old Los Angeles Yellow Cars, stops on the Embarcadero.
Photo by Patrick Burns

STREETCARS ARE DEVELOPMENT ORIENTED

TRANSIT:



- Permanence of fixed guideway helps mitigate risk
- High densities, low parking ratios increase profit
- These densities not possible without a streetcar

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% |

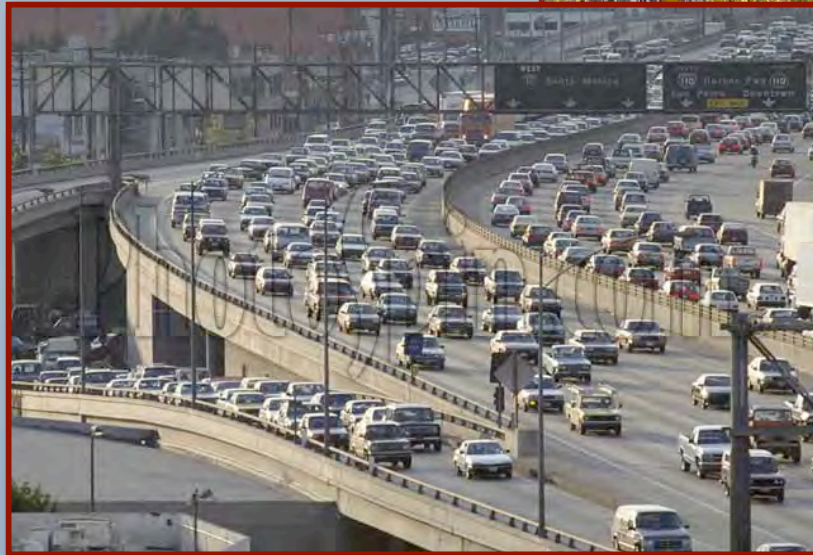
Source: Reconnecting America

TRANSIT AND CLIMATE CHANGE

- 30% of total GHG emissions in U.S. come from vehicles (Source: EPA)
- Since 1980 VMT increased 3 times faster than population because of sprawling growth
- VMT expected to increase 59% by 2030 (Source: EPA)
- Stronger CAFE standards alone won't offset VMT increase

A transit rider creates 65% fewer greenhouse gas emissions than an auto user for same trip.

(Source: Canadian Urban Transit Association)



Technological fixes alone won't solve the problem

TOD AND CLIMATE CHANGE

Studies show compact mixed-use development generates less VMT

- Compact development reduces VMT 20-40%
- Doubling density reduces VMT per capita by 20%
- Residents of TOD 5 times more likely to use transit; people who work in TOD 3.5 times more likely
- 75% of TOD HHs own 1 car or no cars
- 45% of workers in half mile radius of transit walk, bike or take transit compared to 14 % in neighborhoods with no transit

If 60% of new development was transit-oriented GHG emissions would decrease 12% by 2050



VMT increasing 3 x faster than population in U.S. Except in PORTLAND . . .

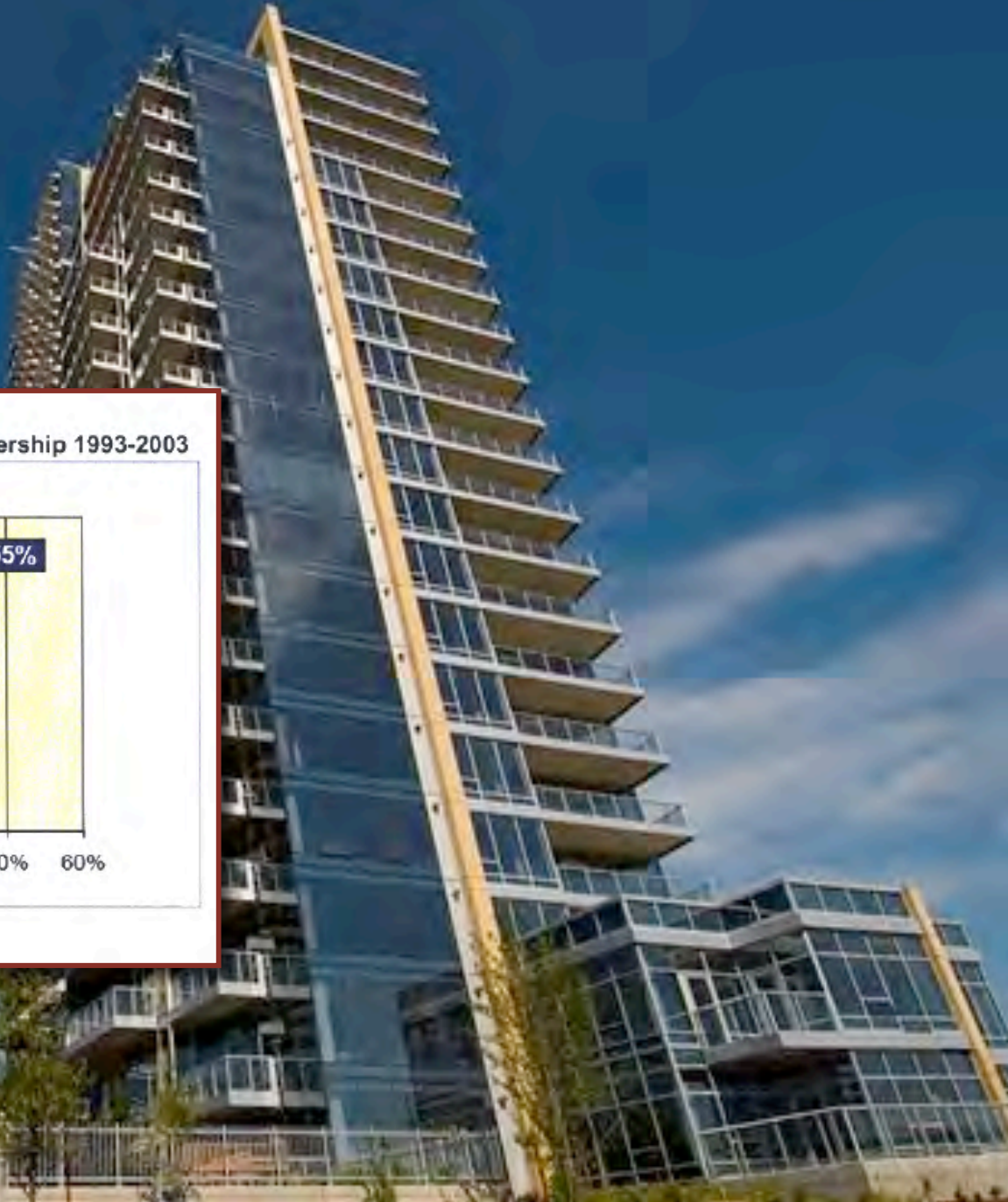
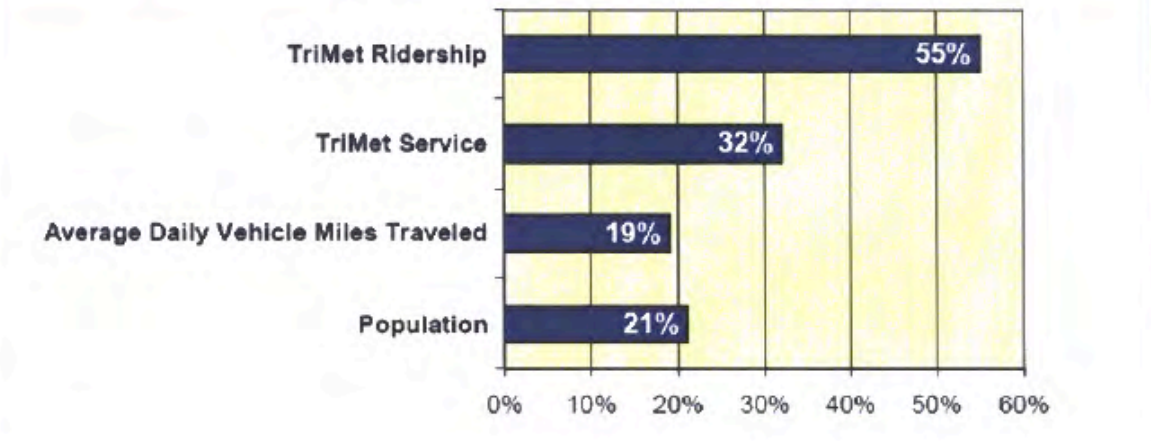


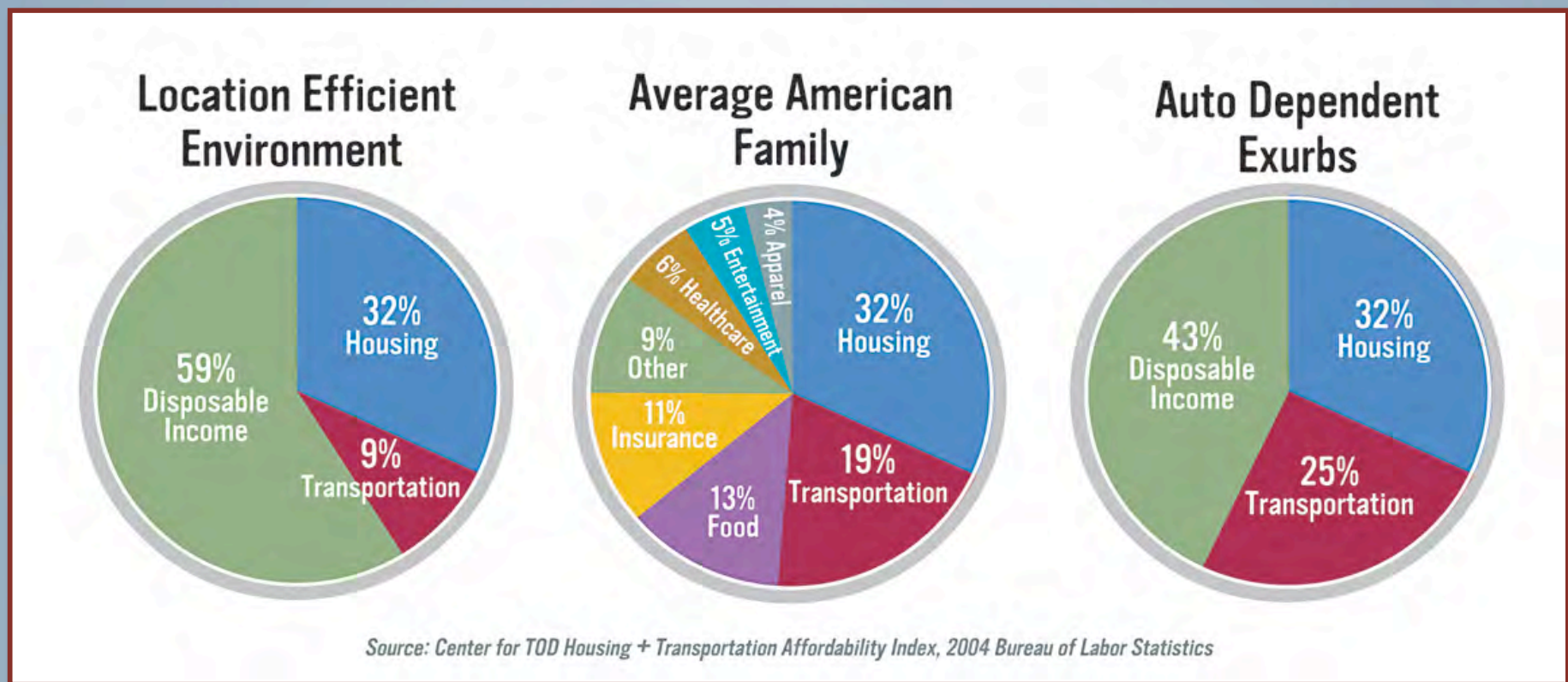
Figure 3-11

Comparison of Population, Vehicle Miles Traveled, Transit Service & Ridership 1993-2003



Source: TriMet

TOD IS AN AFFORDABILITY STRATEGY



AFFORDABILITY IS NOT JUST ABOUT HOUSING COSTS -- IT'S ABOUT THE COMBINED COST OF HOUSING AND TRANSPORTATION

- The average HH spends 51% of income on housing & transportation, and costs are rising.
- Whereas HHs in auto-oriented neighborhoods spend 25% of income on transportation, HHs in transit-oriented neighborhoods spend just 9% -- a savings of 16%.

STREETCAR WAS A WATERSHED EVENT IN PORTLAND'S DOWNTOWN



In the Pearl:

- 140 projects worth \$3.5 billion -- 10,000 housing units, 5.5 million sf retail
- 25 percent of housing is affordable
- Developers built at 90 % allowable density next to line, twice as high as further away
- Portland achieved 20-year housing goal in 7 years
- Issued record number of building permits 7 years in a row

In South Waterfront

- Even more ambitious redevelopment effort – 5,000 jobs, 3,000 housing units
- Connects to downtown via streetcar, to OHSU via aerial tram
- Sustainable building practices throughout (built to LEED Platinum standards)
- Developer building streets, riverfront greenway, parks

STREETCARS FOCUS AND SHAPE DEVELOPMENT



HOVEE STUDY IN PORTLAND (2005) SHOWED:

BEFORE alignment was announced:

- Developers built at 30% of allowable density.

AFTER alignment was announced:

- Developers built at 90% of allowable density within 1 block of the alignment, 75% within 2 blocks of alignment, and 40% 3 blocks and further away.

BEFORE alignment was announced:

Land located along a block of the alignment captured 19% of all development in the CBD.

AFTER alignment was announced:

These same blocks captured 55% of all new development.

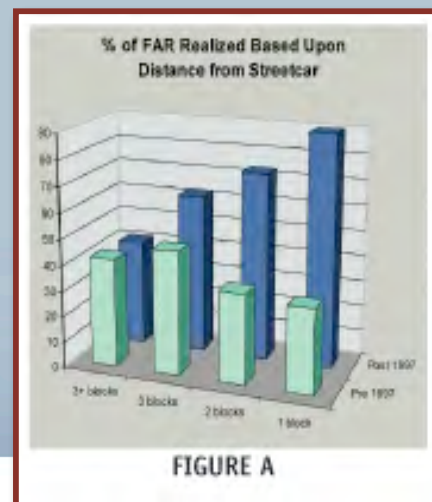


FIGURE A

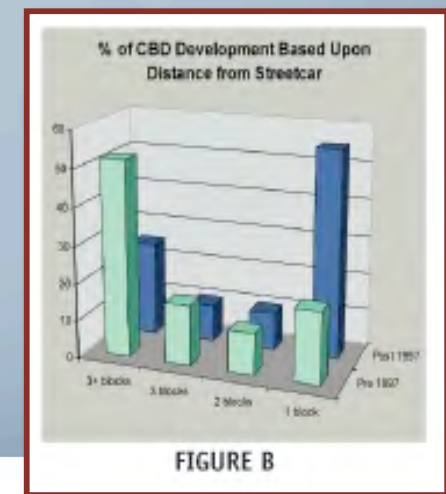


FIGURE B

PORTLAND LESSONS LEARNED:

- Developer agreements can leverage significant public benefit
- One or more large development sites needed with owners willing to work with public sector
- Local improvement districts can help fund streetcar & improvements
- Involving stakeholders is critical



- Success of early projects demonstrate market demand for higher-densities, mixed use, less parking
- High density development does not = a livable community. Also need affordable housing, parks, public space and art.

KENOSHA: SMALL TRANSIT FOR SMALL CITIES

- As in Portland, streetcar connected downtown to large redevelopment site.
- City dusted off 1925 plan to connect waterfront to downtown with boulevard, sidewalks and streetcar, creating new higher-density neighborhood on water.



- Streetcar connects new neighborhood to commuter rail station with service into Chicago
- Kenosha growing rapidly as people leave Chicago for more affordable housing; streetcar makes it possible to accommodate growth sustainability with minimal traffic.
- Developers now proposing 14-story buildings in otherwise very low-density downtown.
- Residents have new destination park and amenities.

SAN FRANCISCO: MUSEUMS IN MOTION

- Wildly popular F Line helped in rebirth of Embarcadero as grand waterfront boulevard with streetcars and light and heavy rail



- F Line success fueled efforts to build E-Line to provide more service to more destinations using same tracks
- Muni buys historic cars from around the world and dresses them up in the livery of historic systems

- Ridership so far beyond projections

-
- 20,000/day, limited only by capacity and service -- transit agency has scrambled to find more cars

LITTLE ROCK: ROLLING ON PRESIDENT CLINTON AVENUE



- Connects dozens of destinations along picturesque Arkansas River and to the Clinton Library
- Streetcar acts as traffic calming device and has created much more lively streetlife
- Billboard shows that developers see streetcar as a draw
- Streetcar got 6 federal earmarks totaling \$16 million over 8 years; local government invested just \$4 million

TAMPA: CONNECTING DISPARATE PLACES INTO “*SOME PLACE*”

- Streetcar helped promote modern, dense development including fashionable new high-rise residential-shopping-entertainment district called Channelside
- Tampa is not a cab town like New York, so streetcar serves
- large numbers of tourists and
- conventioners without cars
- Connects convention center, aquarium, arena, cruise ship terminal, Ybor City historic district, Channelside



- Funded in part with revenues from tax assessment district; when it came up for annual vote last year there was no dissent

- “Streetcar is an exercise in place-making. Transportation is never about moving people from A to B. It’s a tool for creating communities.”

WHICH IS BETTER? CITIES FILLED WITH CARS OR WITH PEOPLE?

THE NEW REALITY:

- Traffic isn't going away -- EVER!
- Gas isn't getting any cheaper
- Growing concern about climate change, energy consumption and GHG emissions
- Financial constraints
- Diminishing natural resources
- Changing demographics -- older, smaller HHs with singles becoming new majority
- Real estate market is changing
- Transit is increasingly seen as a key place-making amenity

ONE SOLUTION: THE TRIP NOT TAKEN

