

Growing Wealthier

Smart Growth,
Climate Change
and Prosperity

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Clean Air Policy
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Smart Growth, Climate Change and Prosperity

Steve Winkelman
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With special guest:
Chris Leinberger

Public Webinar
January 20, 2011



Transportation Program

What We Do

Research

Technical assistance

Policy proposals

Dialogues

Key Products

Transportation and GHG Trading paper

State Climate Plans

Transportation Emissions Guidebook

Growing Cooler

Dollar per Ton study

**Data & Capacity Needs for Transport
NAMAs**



**Transportation
GHGs**

Vehicles

Fuels

VMT

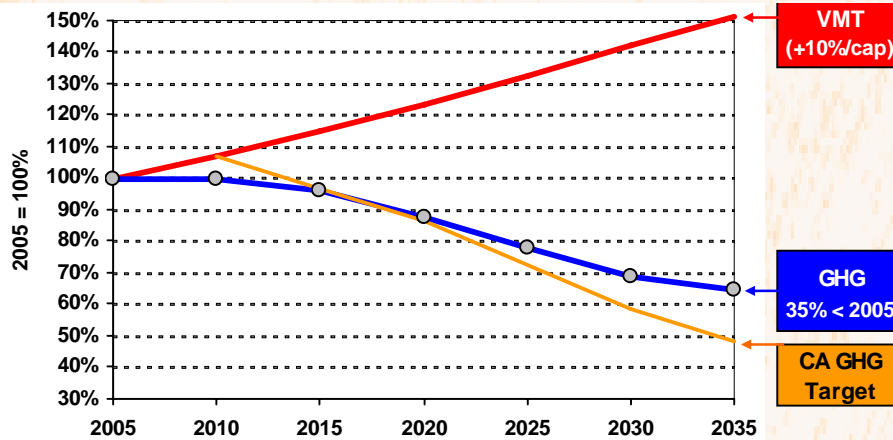
Results

Put the 'third leg of the stool' on the policy map:
reducing VMT is

- essential
- achievable
- cost effective.



Results



Source: S. Winkelman, CCAP. Assumes 55 mpg LDV vehicle standards in 2030, 15% LCFS.

VMT/ CO2 graph helped convince California policy makers to address metro VMT and set robust GHG targets.



Results



**Transportation GHG
Reduction Incentive
proposal incorporated in
House and (draft) Senate
climate bills.**

Results



NATIONAL ACADEMY OF SCIENCES



THE NATIONAL ACADEMIES
Advisers to the Nation on Science, Engineering, and Medicine

**Travel data improvement
recommendations
helped precipitate a
\$670,000 NAS study.**



Why *Growing Wealthier?*

- Research
- Inform
- Inspire
- Motivate

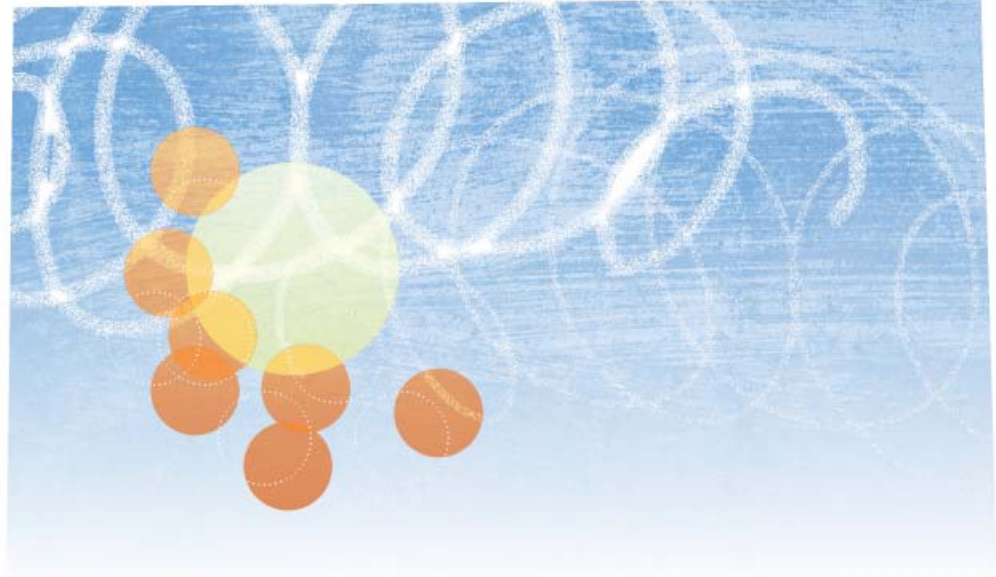


What could the new economy look like?

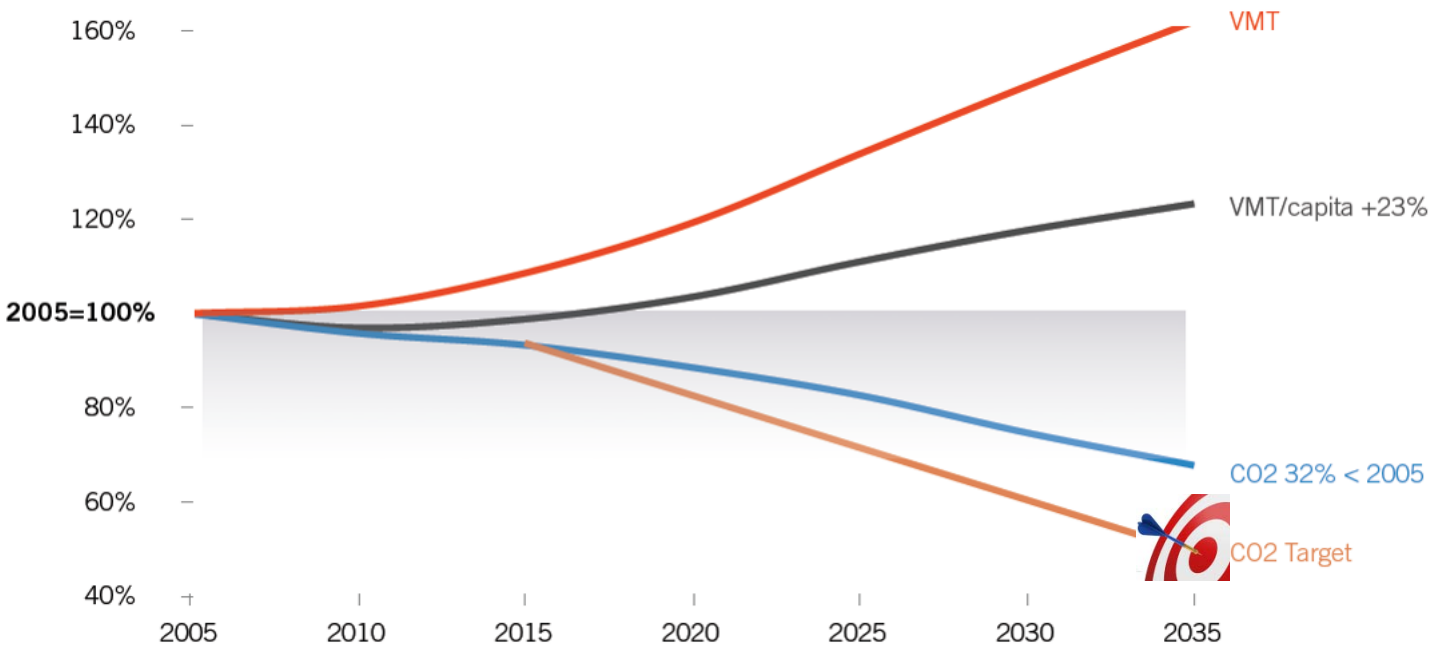
Metropolitan

Easy Access (less driving)

Prosperous



Why should there be accessibility with less driving?

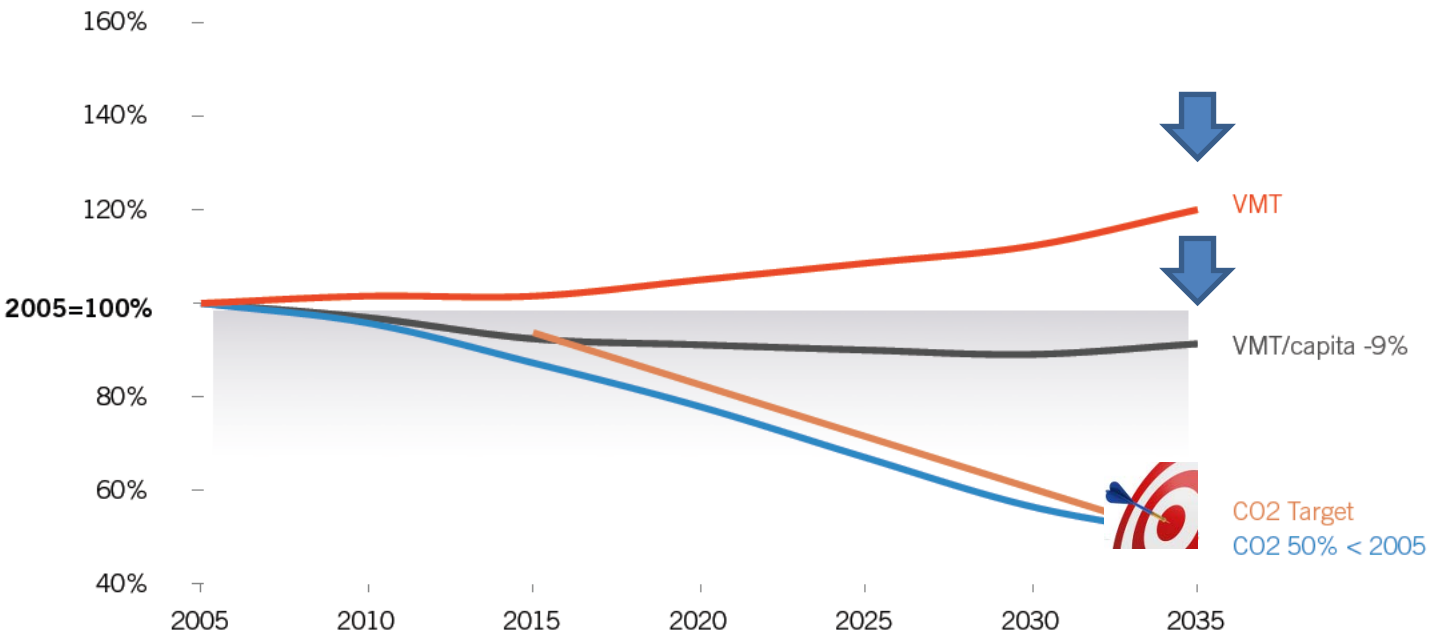


Source: *Growing Wealthier*, CCAP 2011

Mitigating climate change is one reason.



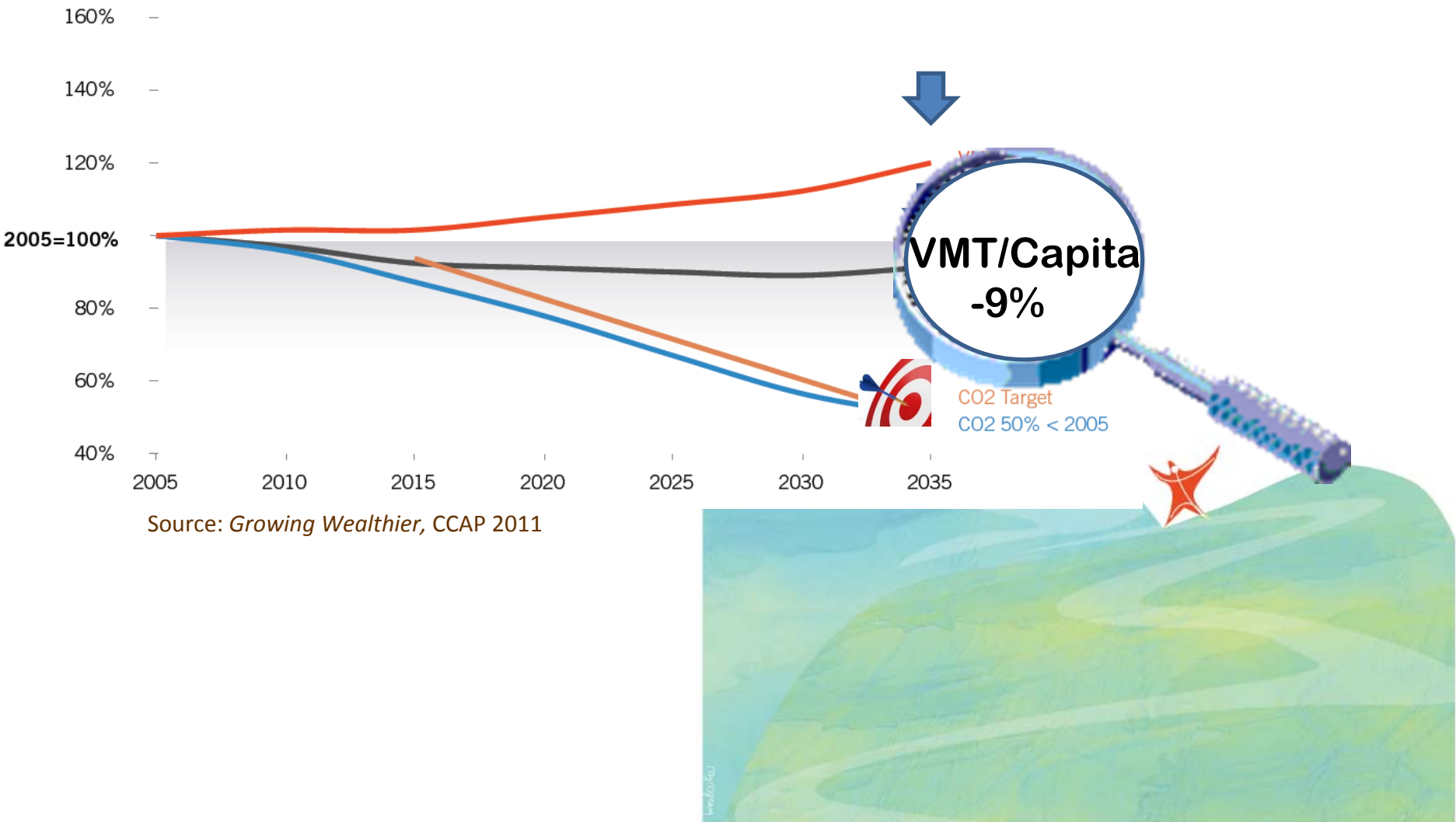
Transportation climate targets can be met...



Source: *Growing Wealthier*, CCAP 2011



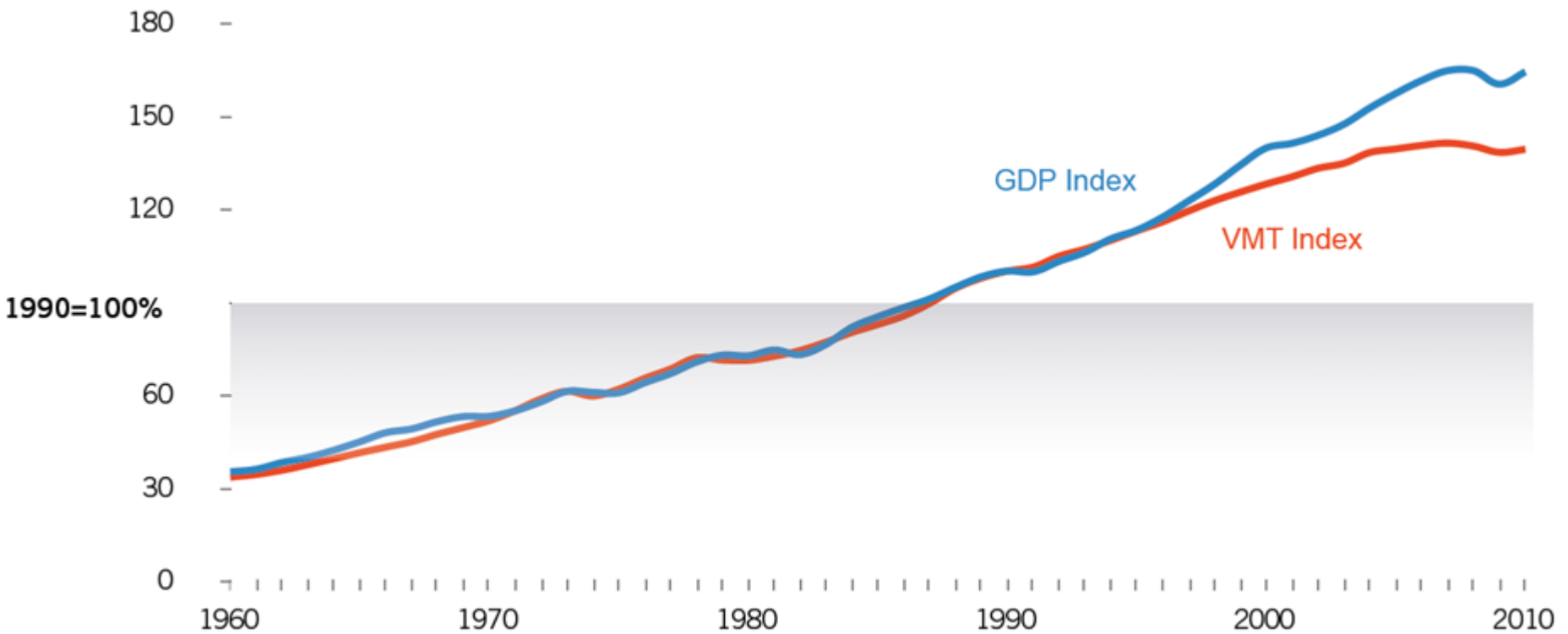
By driving 2 ½ miles less per person per day





**Doesn't driving
make us
prosperous?**

**Not like it
used to.**

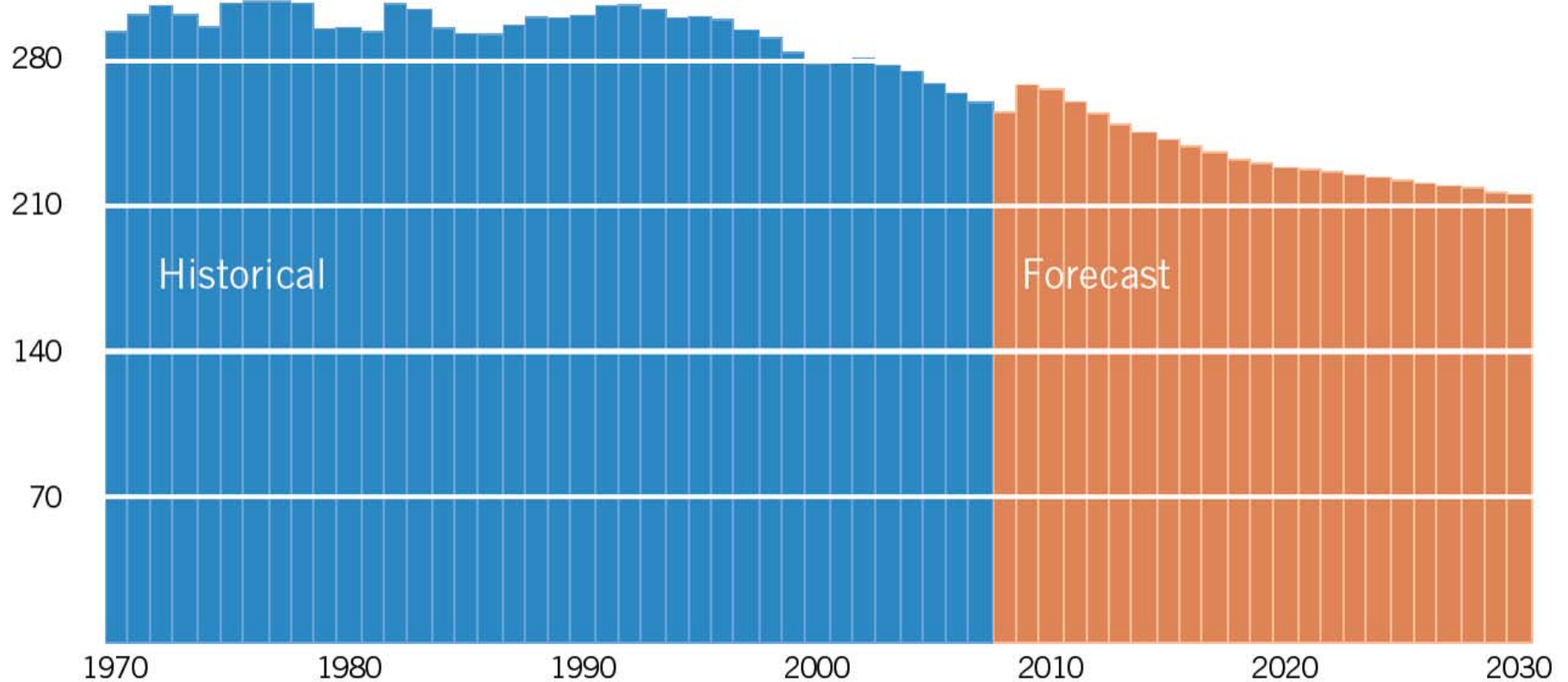


Source: *Growing Wealthier*, CCAP 2011

By 1996 economic growth began to outpace driving growth.



US Vehicle Miles Traveled per \$1000 GDP



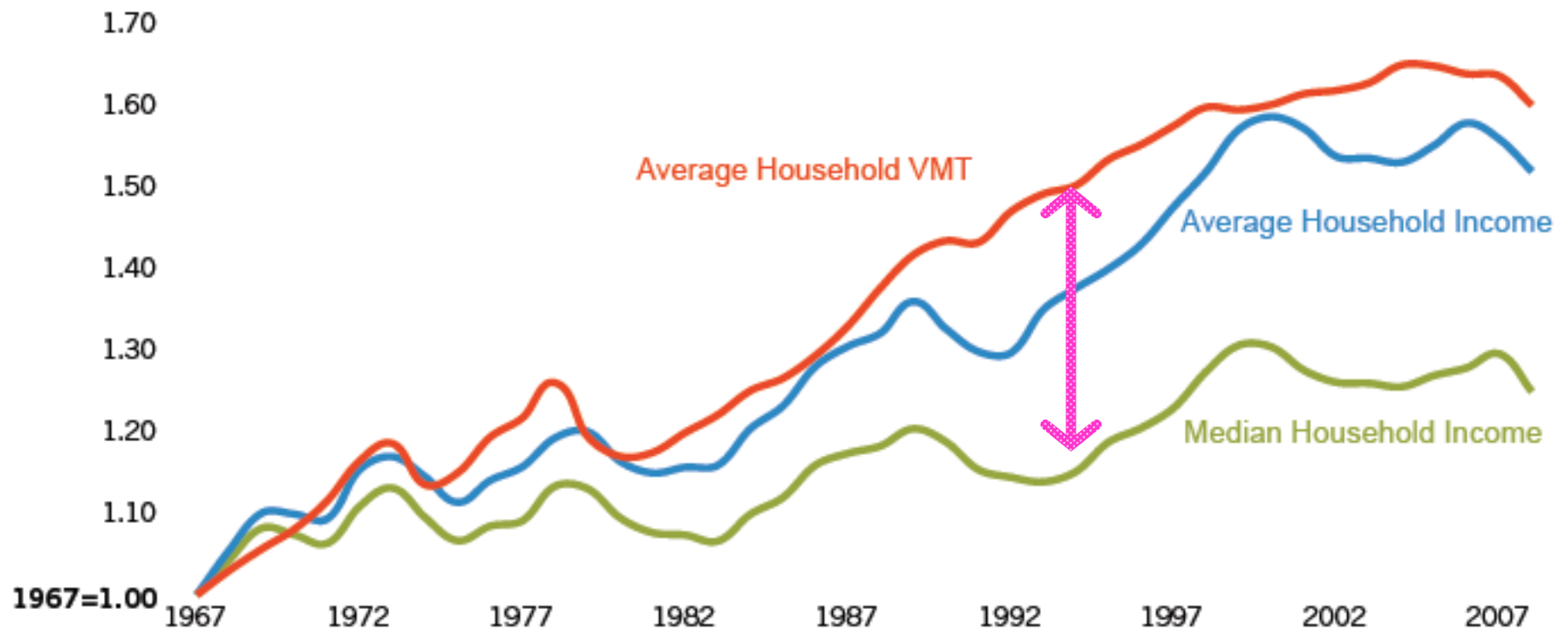
Source: US Chamber of Commerce, as cited in *Growing Wealthier*, CCAP 2011

It takes fewer miles to make a GDP dollar than it used to.



And consider....





Source: *Growing Wealthier*, CCAP 2011

Most households between 1967 and now are driving substantially more but their income has not grown proportionately.





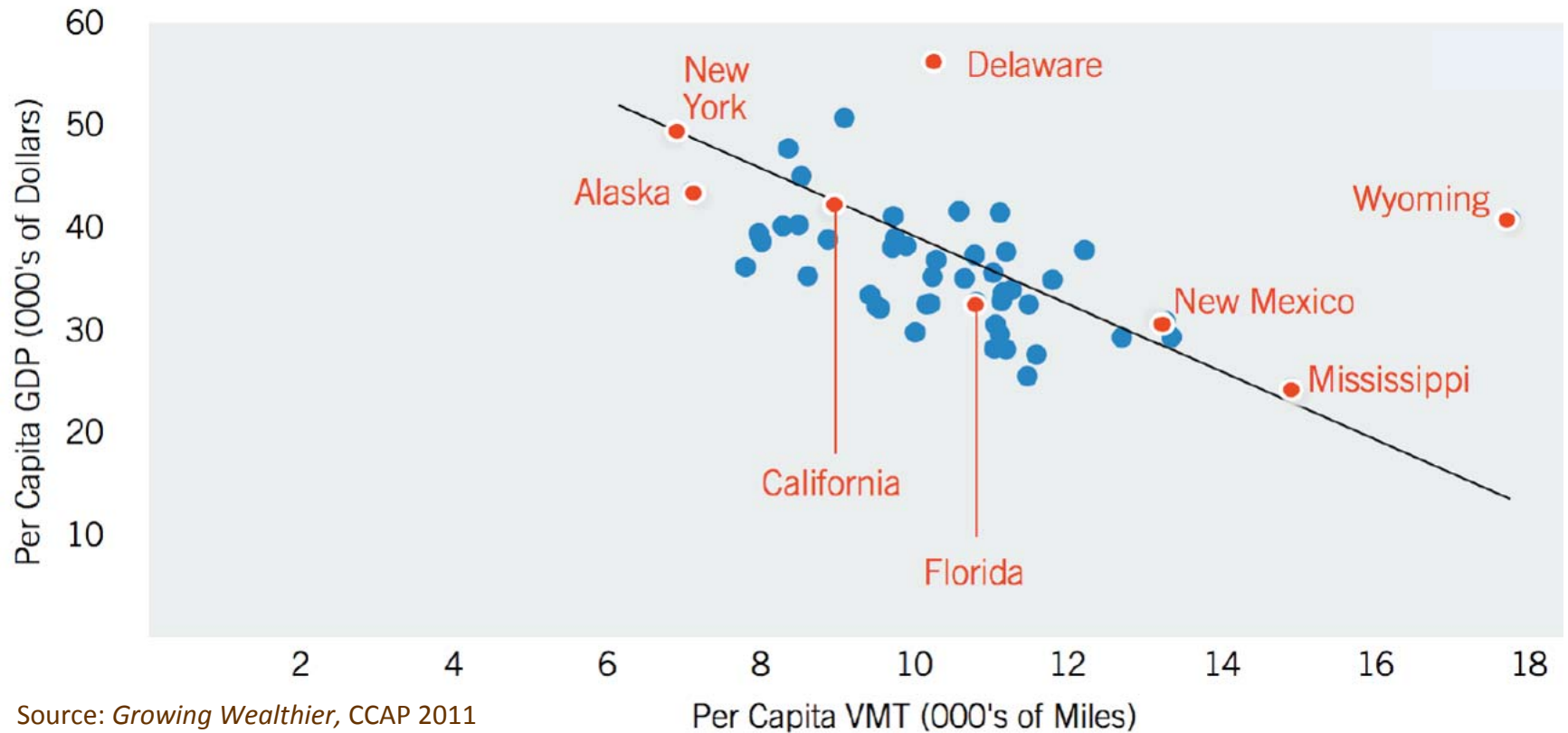
Travel that contributes little or nothing to households and local economies might be called “empty miles”





How much VMT growth in the past 50 years has been “empty miles”?





**States with high per capita GDP
tend to drive less, not more**





Mobility – the ability to move

**Accessibility – the ability to
get where you want to go**

Key Principles of Smart Growth

1. Create a Range of Housing Opportunities and Choices
2. Create Walkable Neighborhoods
3. Encourage Community and Stakeholder Collaboration
4. Foster Distinctive, Attractive Communities with a Strong Sense of Place
5. Make Development Decisions Predictable, Fair and Cost Effective
6. Mix Land Uses
7. Preserve Open Space, Farmland, Natural Beauty and Critical Environmental Areas
8. Provide a Variety of Transportation Choices
9. Strengthen and Direct Development Towards Existing Communities
10. Take Advantage of Compact Building Design

These are common sense development principles.





More like
“Back to
the Future”

than “The Jetsons”



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These principles can improve accessibility and reduce the need for driving.



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Smarter development patterns can also:

- **make money**
- **save on costs**
- **improve quality of life**

- for households, businesses and governments.



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How does it happen?

Improved accessibility

More efficient travel

More efficient services

Lower energy costs

Use natural services

Inclusive planning

Quality design



Return on Investment

Business

Household

Municipal and
Region

Nation

Savings on Expenditures

Business

Household

Municipal and
Region

Nation

Improved Quality of Life

Business

Household

Municipal and
Region

Nation



Return on Investment

Municipal and Regional

Dallas, Texas – In the first year after the light rail system began operation downtown retail grew 33 percent

Portland, Oregon – Investment of \$103 million in streetcar attracted \$3.5 billion in adjacent private investment.

Silver Spring, Maryland - \$360 million public/private partnership in mixed use shopping center drew 1 million square of office space raising annual property tax revenue 30%



Return on Investment

Business

Properties with a high “Walk Score” value appreciated nearly 2% more annually than properties with low “Walk Score”

\$1 billion in stimulus money spent on transit created 16,419 job months while \$1 billion spent on highways created only 8,781 job months

A Federal Reserve study found that a metro area twice as dense as another tends to create 20-30% more patents.



Return on Investment

Households

Denver households within ½ mile of light rail line rose in value by 18% between 2006 and 2008; other Denver homes lost 7.5% value on average.



Savings on Expenditures

Household

In the Washington, DC metro area households in central jurisdictions spent about 30% of their incomes on housing plus transportation; in outer suburbs they spent about 40%

Sacramento's Blueprint plan would lower future regional infrastructure costs by approximately \$18,000 per household, reducing tax burdens.

Bay Area Metropolitan Transportation Commission calculated vehicle travel reduction resulting in 15% less GHG would also generate \$140 million in healthcare savings by 2035.



Savings on Expenditures

Municipal and Regional

Kentucky study found new central city households paid \$1 more in annual taxes than services cost; in suburban areas costs were as much as \$1,222 more than tax revenue per household.

Sarasota, FL comparison showed a downtown development cost city \$5 million in infrastructure while paying almost \$2 million in taxes; a similar suburban development cost \$10 million in infrastructure and only generated \$250 thousand in tax revenue.

Garland, Texas tree canopy is credited with diffusing 19 million cubic feet of runoff per storm, that additional water would require \$38 million in retention infrastructure to handle it.



Savings on Expenditures

National

The Victoria Transportation Policy Institute calculated that for each trip not driven, i.e. taken by a mode other than car, society saves \$1 to \$3.50.

TRB study concluded that shifting 15% of new growth into more developed areas by 2025 could save the nation \$105 billion in road infrastructure costs.

Households that travel fewer vehicle miles daily are less vulnerable to gasoline price variations.



Improved Quality of Life

Municipal and Regional

Quality of life was found to be a top reason for Colorado business location decisions with parks and open space the key attribute.

Attractive placemaking efforts in Ohio, Kentucky, Washington, DC and other locations have consistently attracted new businesses and increased visitors to formerly depressed areas.

Residents in King County, Washington were found to get out and walk more in neighborhoods that provided a wide variety of retail services.



Improved Quality of Life

Household

An analysis found a lower rate of pedestrian fatalities in compact urban areas and higher rates in sprawling areas.

In Seattle, increase in neighborhood walkability was associated with more time spent walking and lower body-mass-index.

Public participation in community planning in Sacramento was increased by going through the visioning process and letting residents create their own scenarios.



Surveys by real estate advisor RCLCO reveal that up to 88% of Gen Y (80 million born between 1979 and 1996) prefer to live in an urban setting. One-third are willing to pay for walkability.



Recommendations

- Do Measure Learn
- Equip and Empower



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