

Our Program

Not Your Father's Transportation System

Jim Charlier, Charlier Associates, Inc., Boulder CO

Value Capture Funding for Transit

Roger Hoffmann, Northern Colorado Commuter Rail

Discussion

Agenda

1. Context
2. Federal transportation funding
3. State transportation funding
4. Implications
5. Colorado case study
6. Q & A, Discussion

1. Context

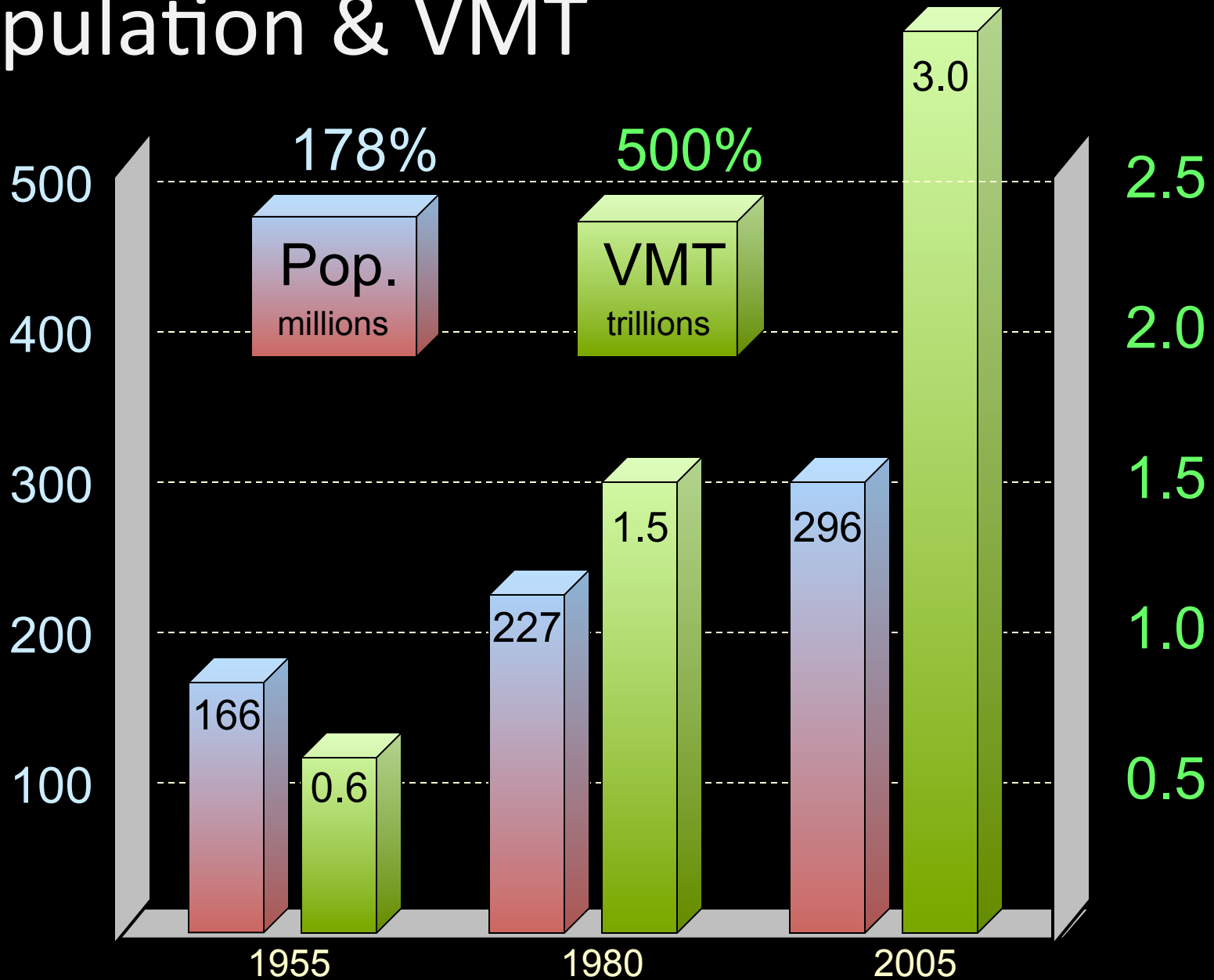


times are a changin'

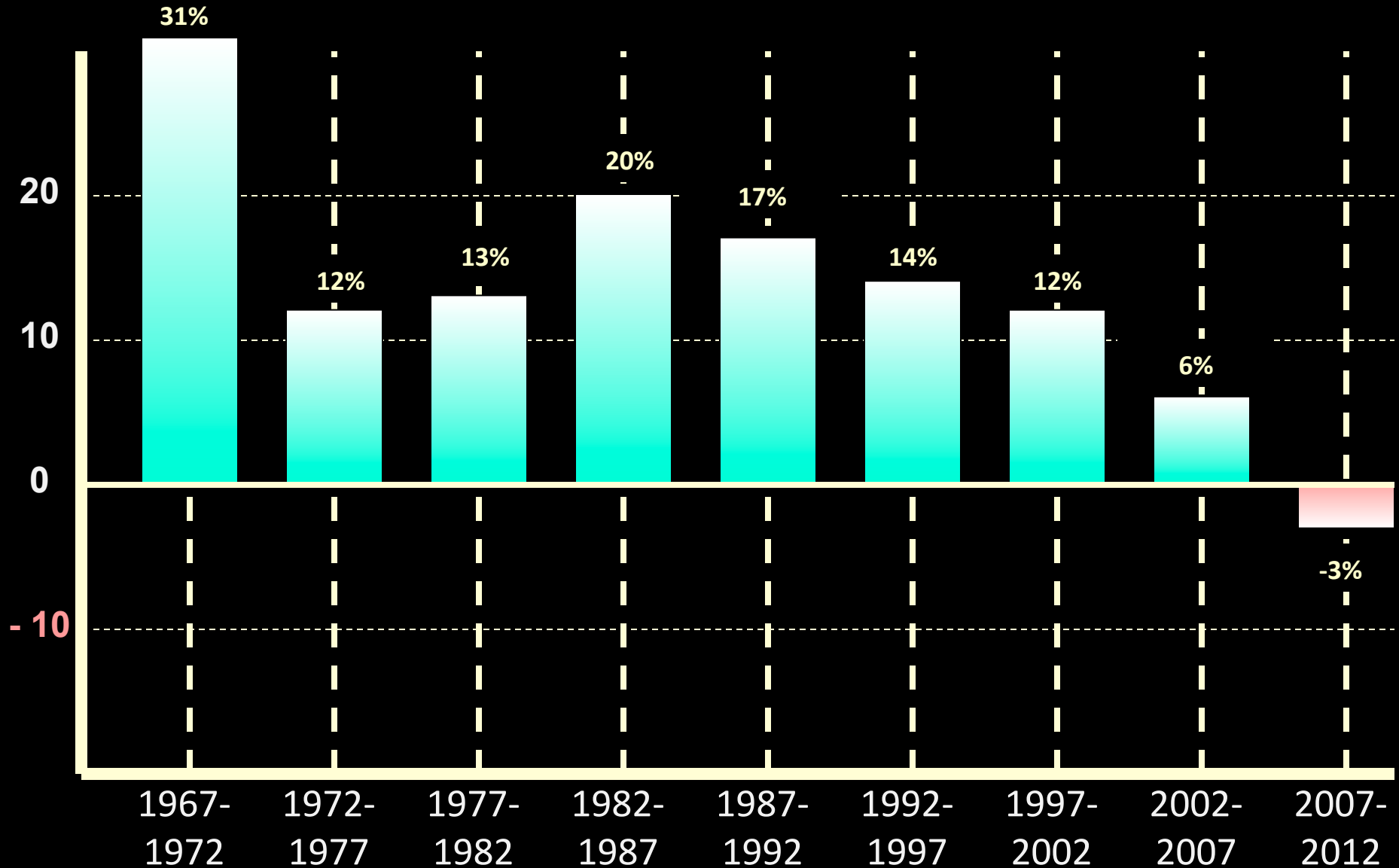
VMT –
vehicle miles of travel

United States

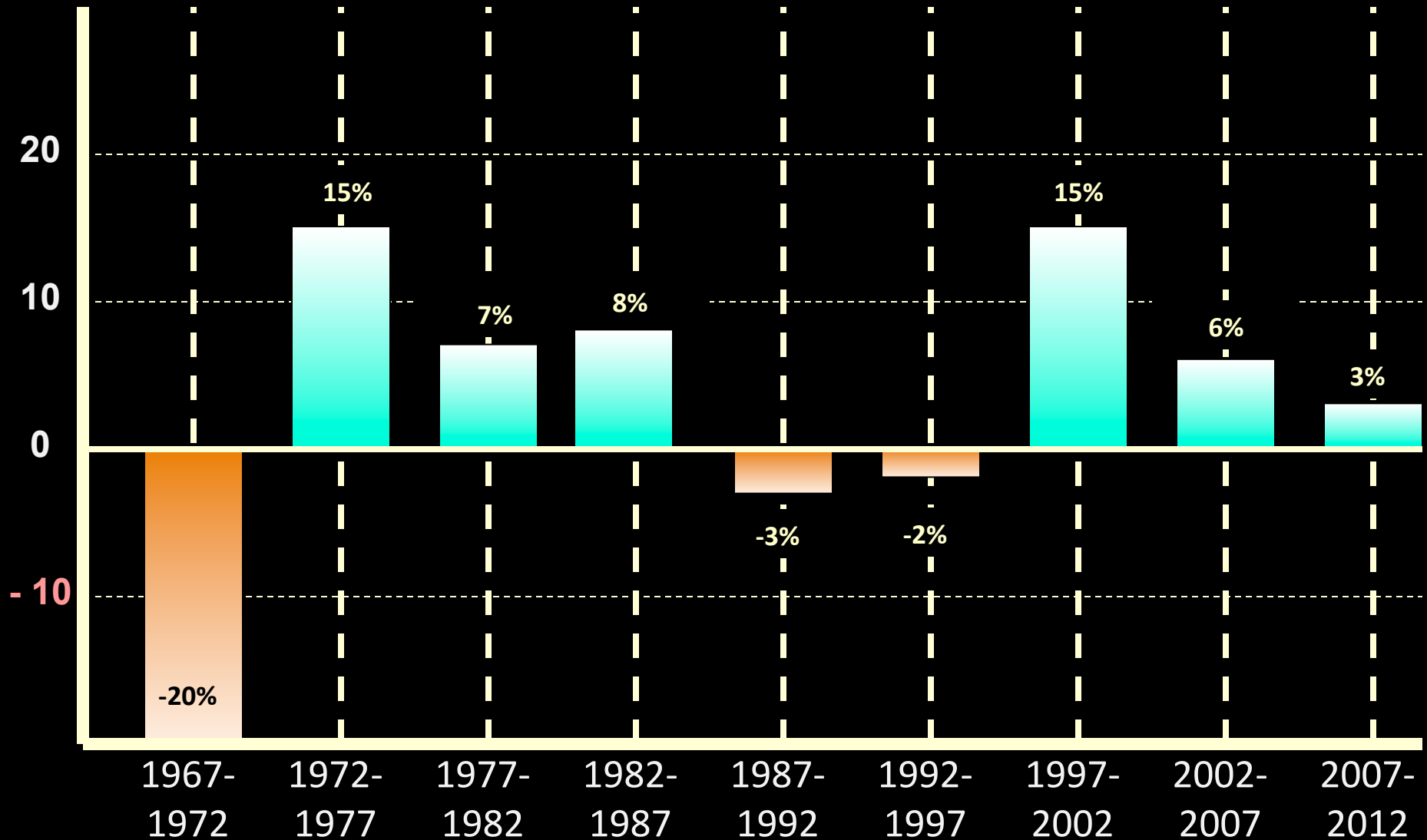
Population & VMT



VMT Growth – 5 Year Increments



Transit Ridership Growth – 5 Year Increments



People 16 – 34 Years Old Are Driving Less

annual mileage decline
2001 to 2009: - 23%

the
push

What Drives VMT?

the
pull

Demographics & Economics

Labor Force
Participation Rate

Household Income

Driver License Rate

Vehicle Ownership

Population

Traffic Enablers

Miles of Roadways

Energy Cost Subsidy

Road Subsidy

Sprawl

Auto Dependency

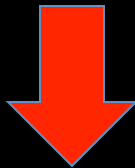
What's the Trend?

Demographics & Economics

Labor Force
Participation Rate



Household Income



Driver License Rate



Vehicle Ownership



Population



Traffic Enablers

Miles of Roadways



Energy Cost Subsidy



Road Subsidy



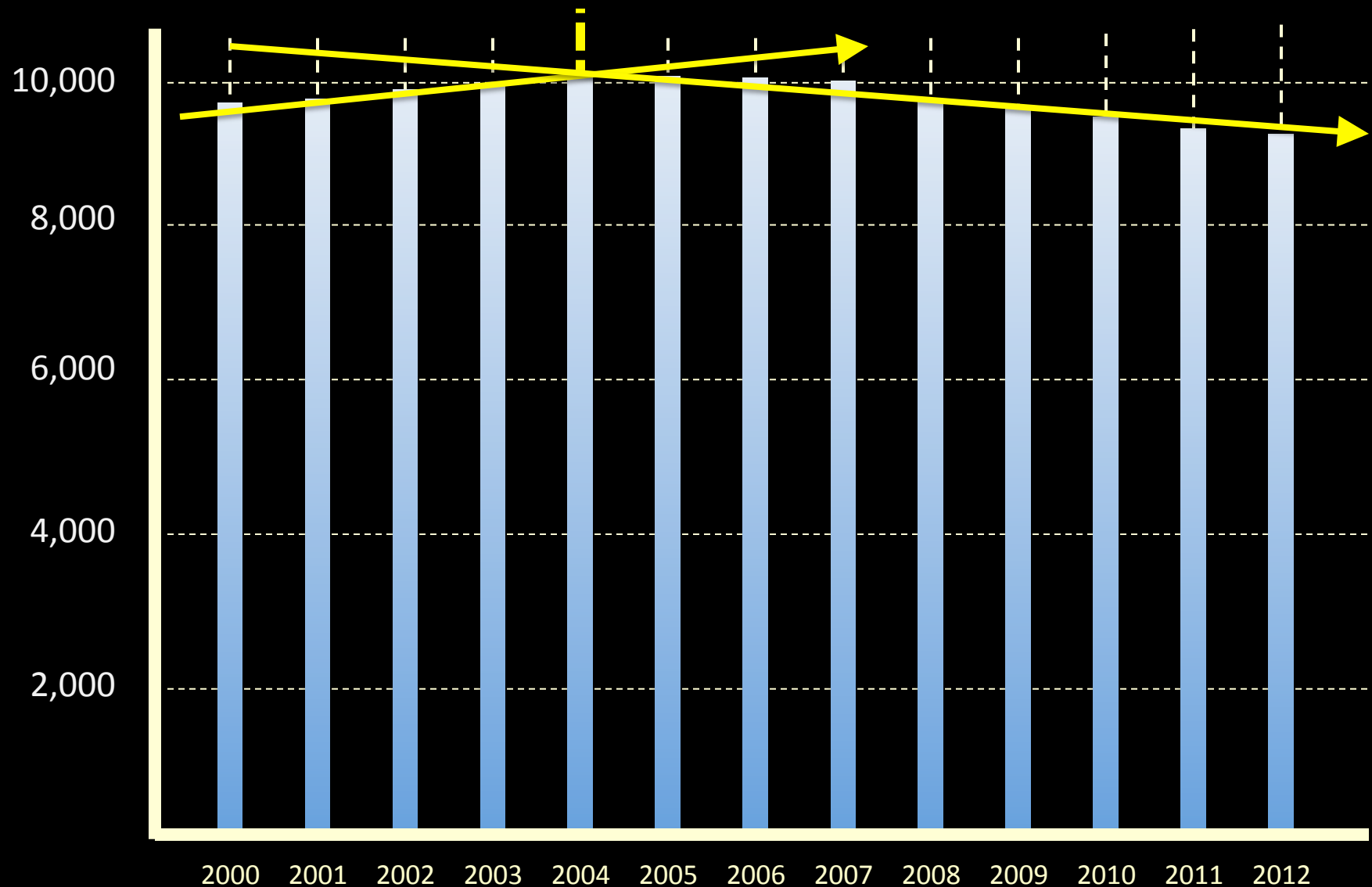
Sprawl



Auto Dependency



Per Capita VMT 2004 Pivot



rural

1800 - 1900

cities

cities

1900 - 2000

suburbs

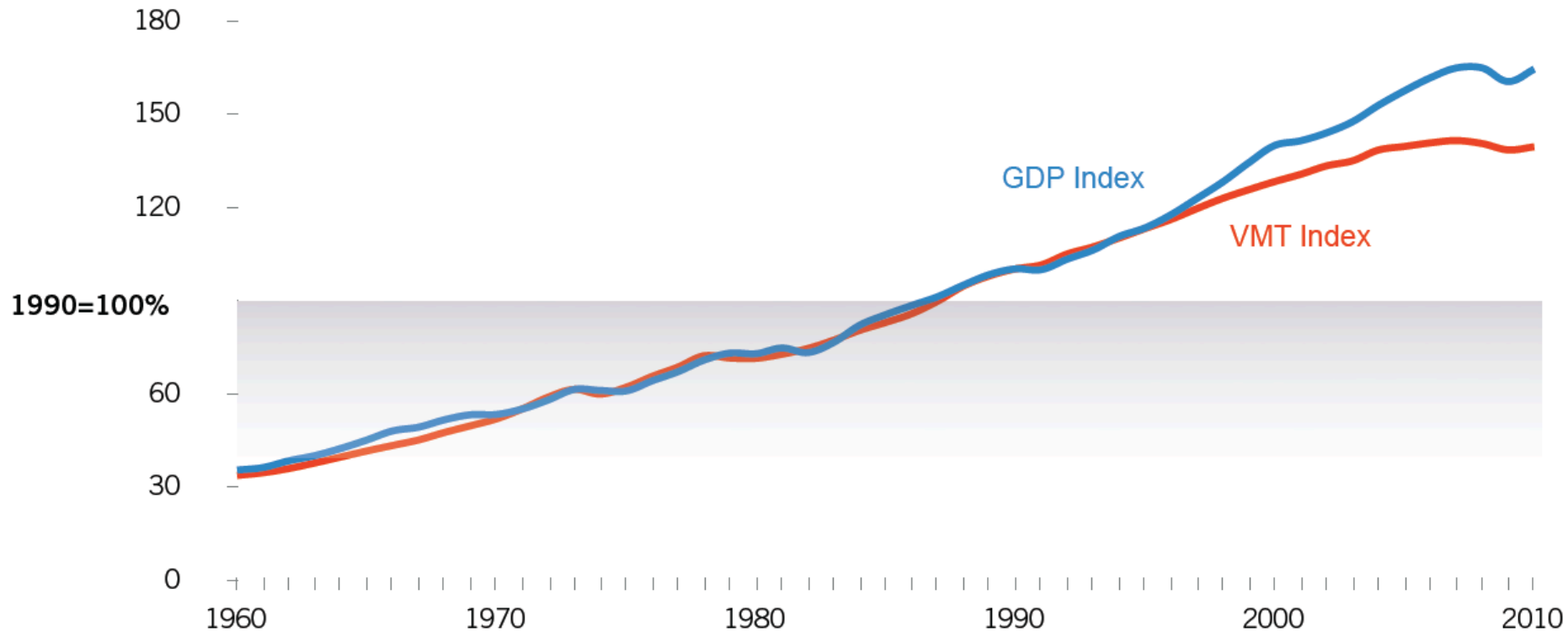
suburbs

2000 -

mixed-use
centers

development patterns in US history

VMT and GDP

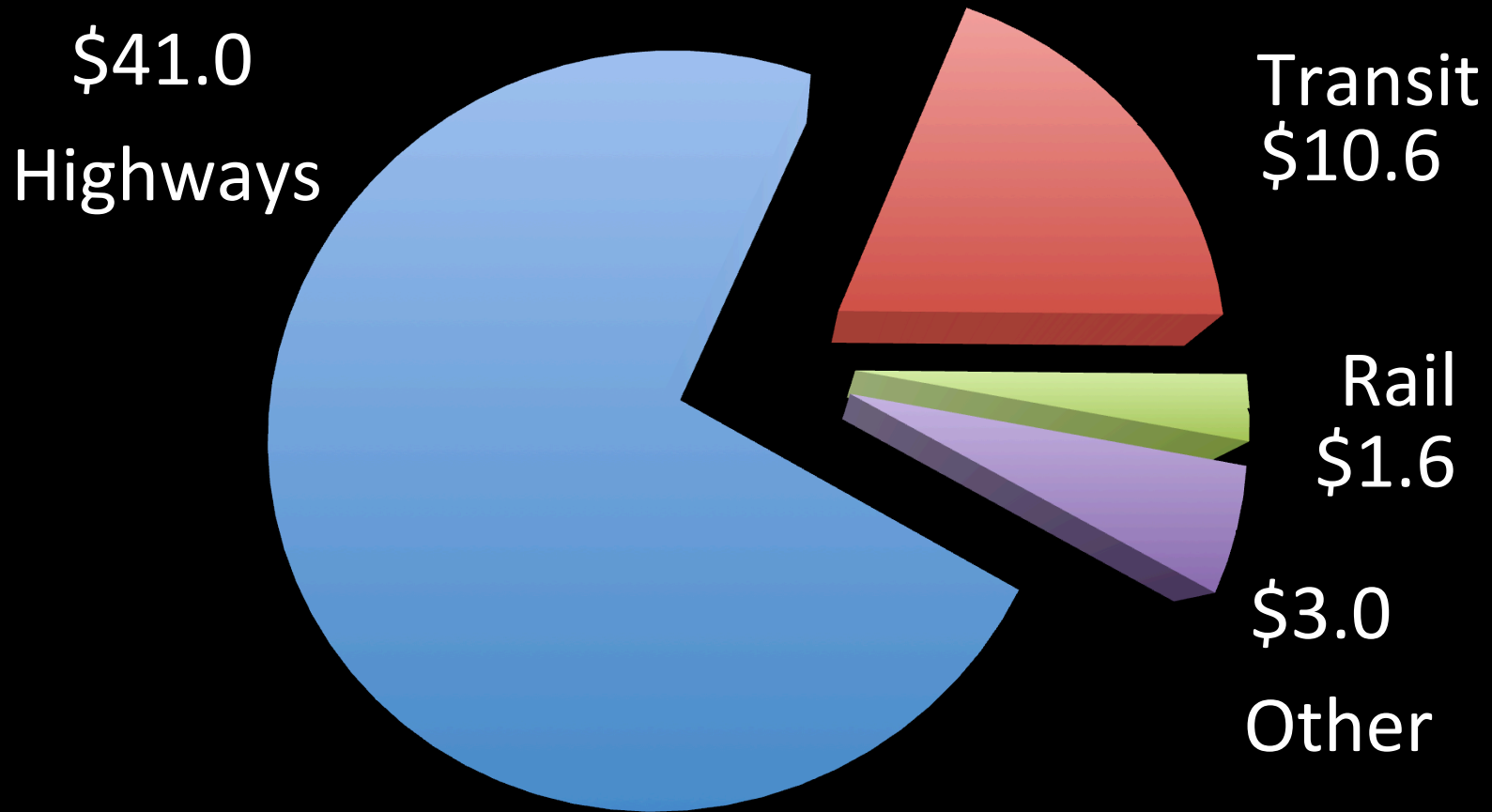


Data Sources: VMT: US DOT, BTS, Table 1-32: US Vehicle Miles, FHWA Traffic Volume Trends August 2010. GDP: BEA National Income and Product Account Table, Table 1.1.6 Real GDP, Chained (2005) Dollars

2. Federal Surface Transportation Funding

Context: Surface Transportation Budget

(2013 – Billions)



Federal Surface Transportation Bills

1956

Original federal aid to highways act (FAHA), first highway revenues act

1961

First federal appropriation for transit (housing act)

1964

First federal aid to urban mass transit (UMTA)

1973

FAHA – created MPOs

1982

Surface Transportation Authorization Act - 1¢ to transit

1991

ISTEA

1998

TEA-21

2003 - 2005

three temporary extensions

2005

SAFETEA-LU

2009-2012

ten temporary extensions

2012

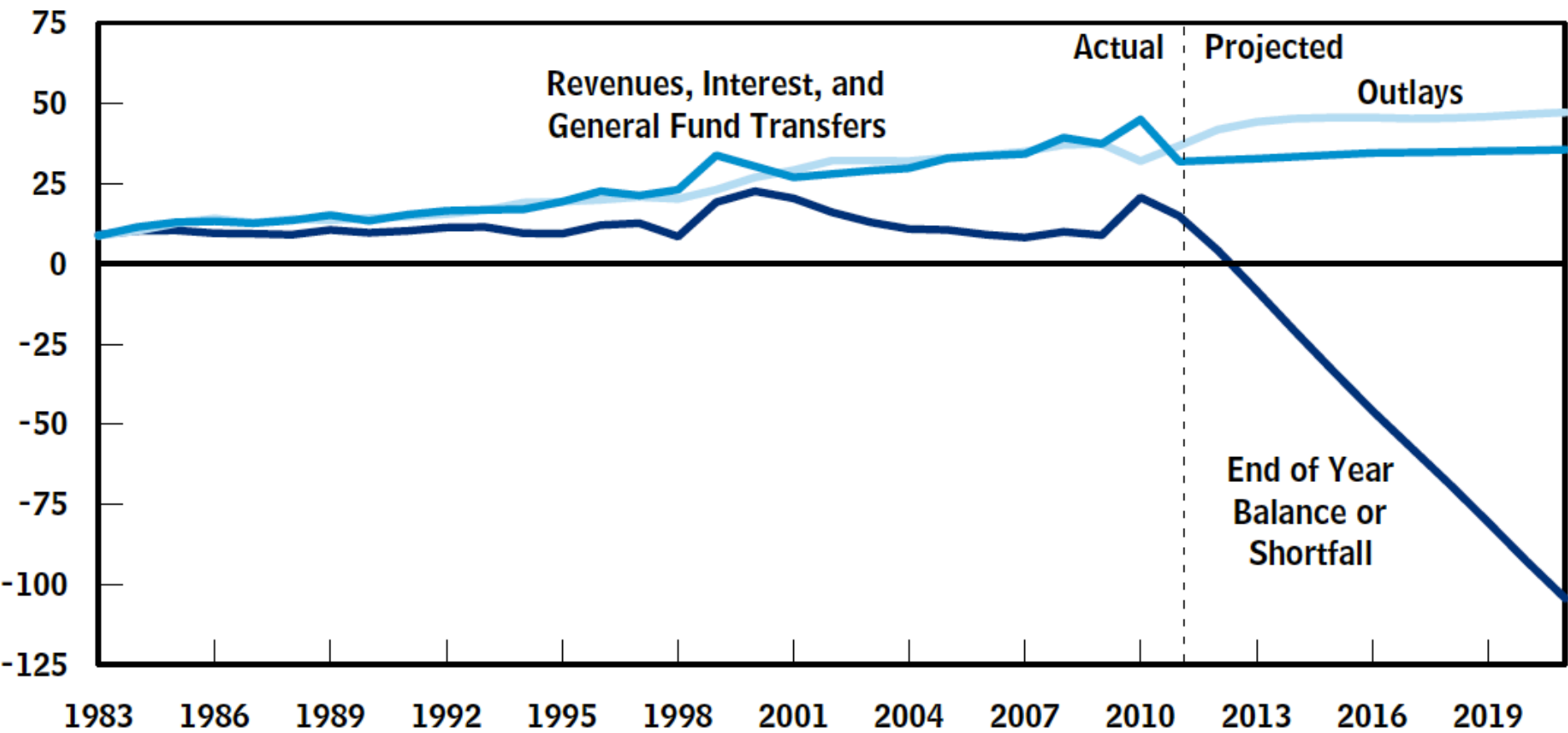
MAP-21

*declining
federal gas tax revenue*

Figure 1.

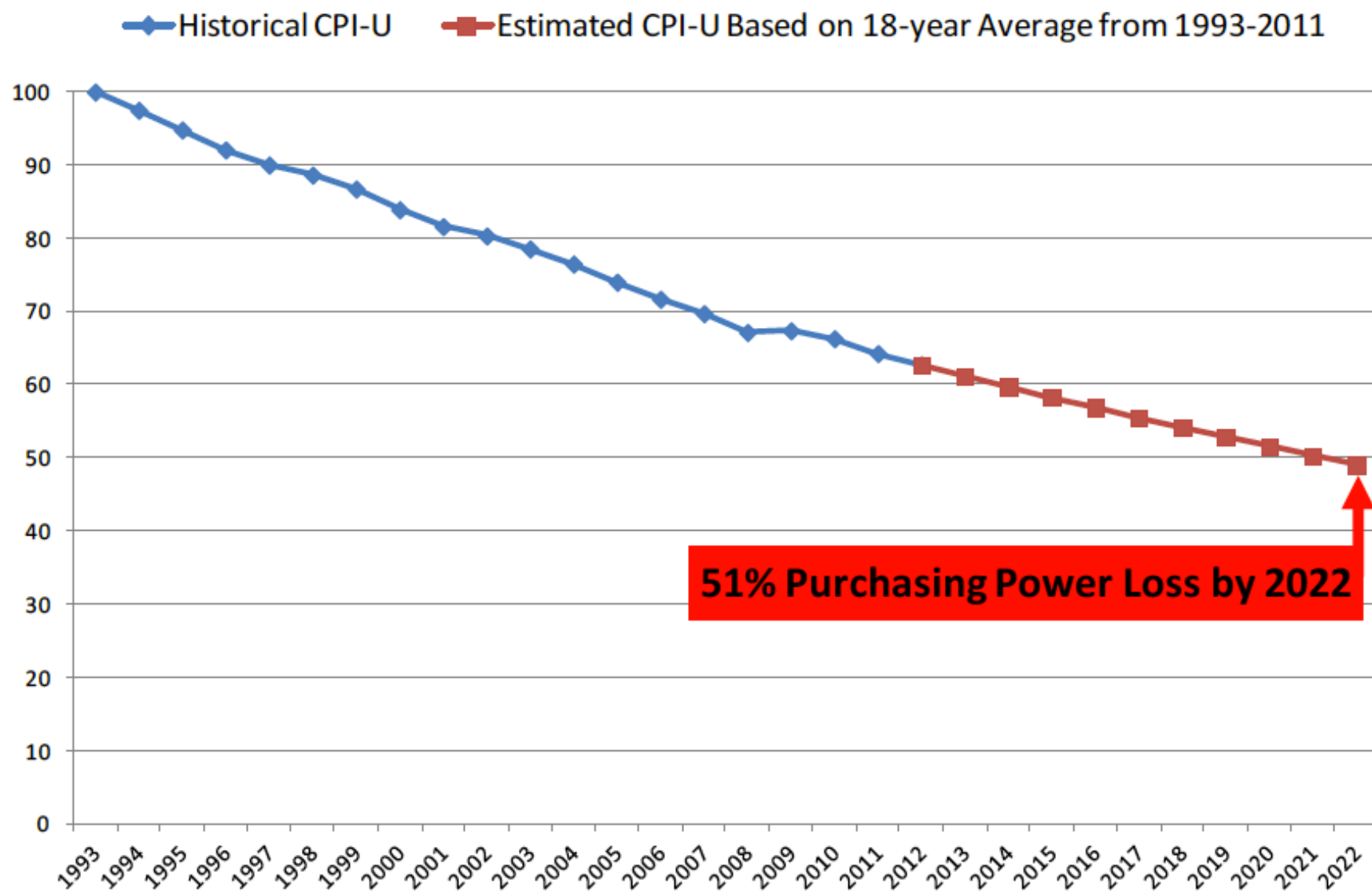
Status of the Highway Account of the Highway Trust Fund

(Billions of dollars)



Source: Congressional Budget Office.

PURCHASING POWER LOSS OF GAS TAX DUE TO INFLATION



*Is the traditional federal
surface transportation
program still viable?*

Current Administration: Two Ideas

1. Award grants administratively via
‘merit-based’ processes *
2. Focus federal funding on capital –
‘shovel-ready’ – projects

** ARRA, TIGER, TIGGER*

Project Phases Eligible for Federal Aid

Planning

\$\$

Project Development

\$\$

Conceptual Design

\$\$

Final Design

\$\$

Construction

\$\$

O & M

\$\$

Recapitalization

\$\$

Traditional Formula
Allocation Systems

Project Phases Eligible for Federal Aid

Planning

Project Development

Conceptual Design

Final Design

Construction

O & M

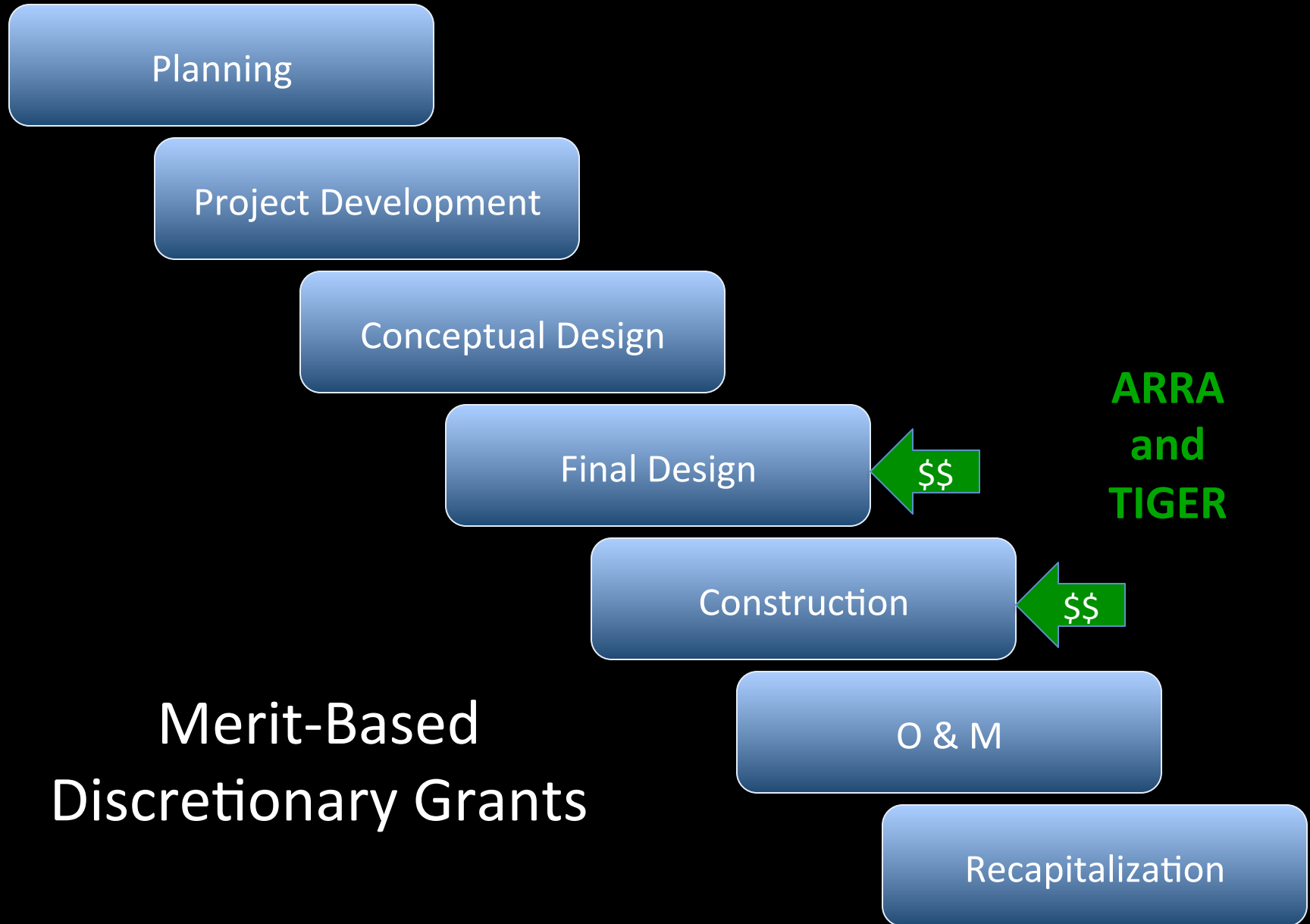
Recapitalization

\$\$

**ARRA
and
TIGER**

\$\$

**Merit-Based
Discretionary Grants**



Current Congress: Limited Agreement

1. Avoid tax increases
2. Rely more on borrowing
3. Rely more on private sector
4. No earmarks

Congressional Earmarks

Transportation Authorization Bill

<i>1995 SAFETEA – LU</i>	<i>5,671</i>
--------------------------	--------------

<i>2012 MAP-21</i>	<i>0</i>
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Congressional Earmarks

Transportation Appropriations – Peak Year (2004)

<i>Number of projects</i>	<i>2,282</i>
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<i>Amount</i>	<i>\$3,859 B</i>
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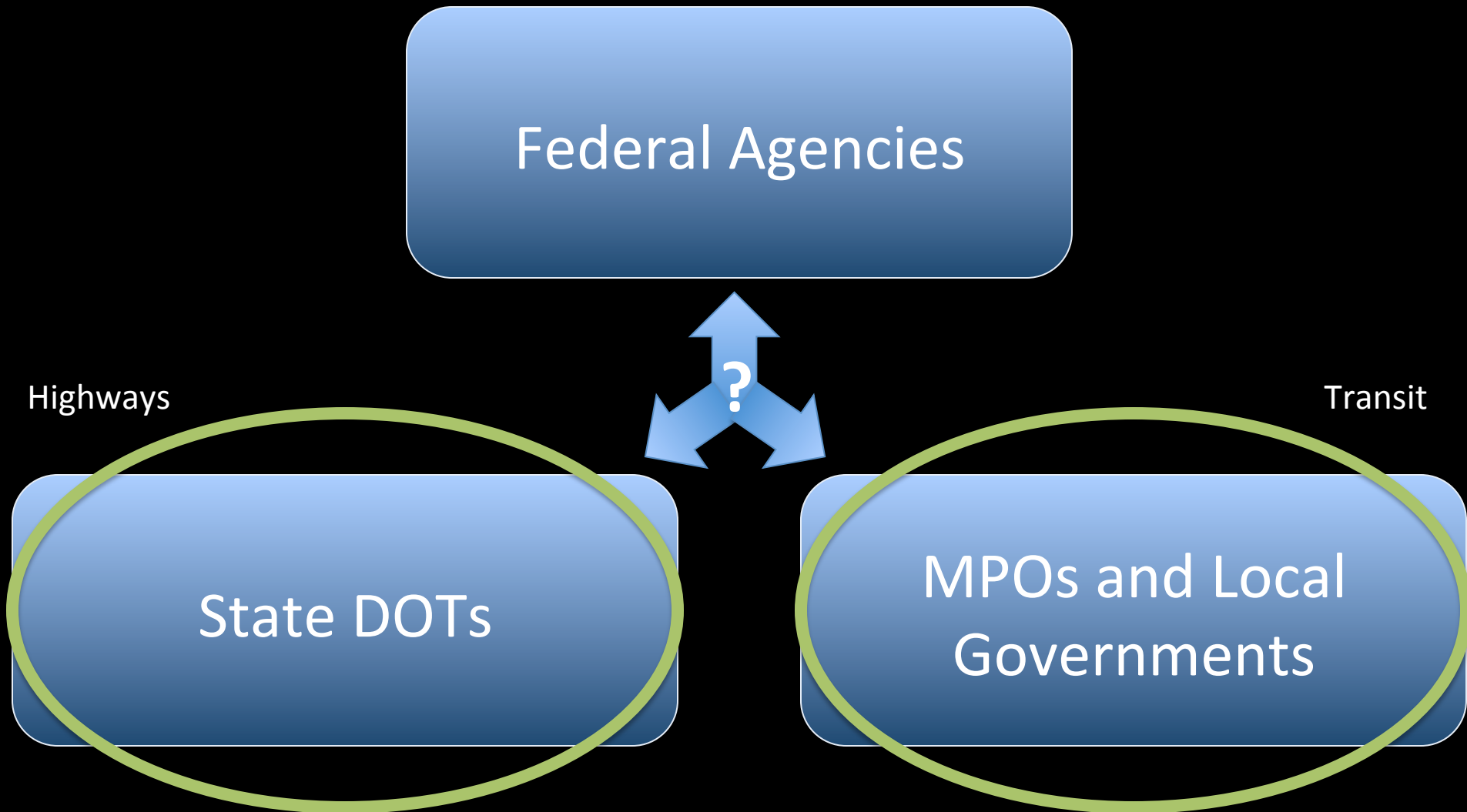
<i>% of appropriation</i>	<i>5.7%</i>
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MAP-21 Policy Directions

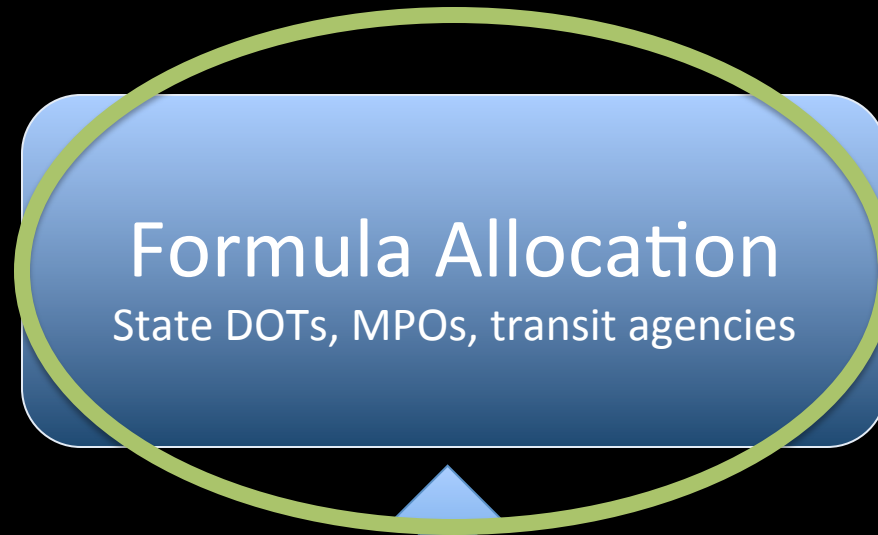
policy outcomes from MAP-21

*MAP-21 = “Moving Ahead for
Progress in the 21st Century”*

Who Decides ⁽¹⁾



Who Decides (2)



Formula Allocation
State DOTs, MPOs, transit agencies

?

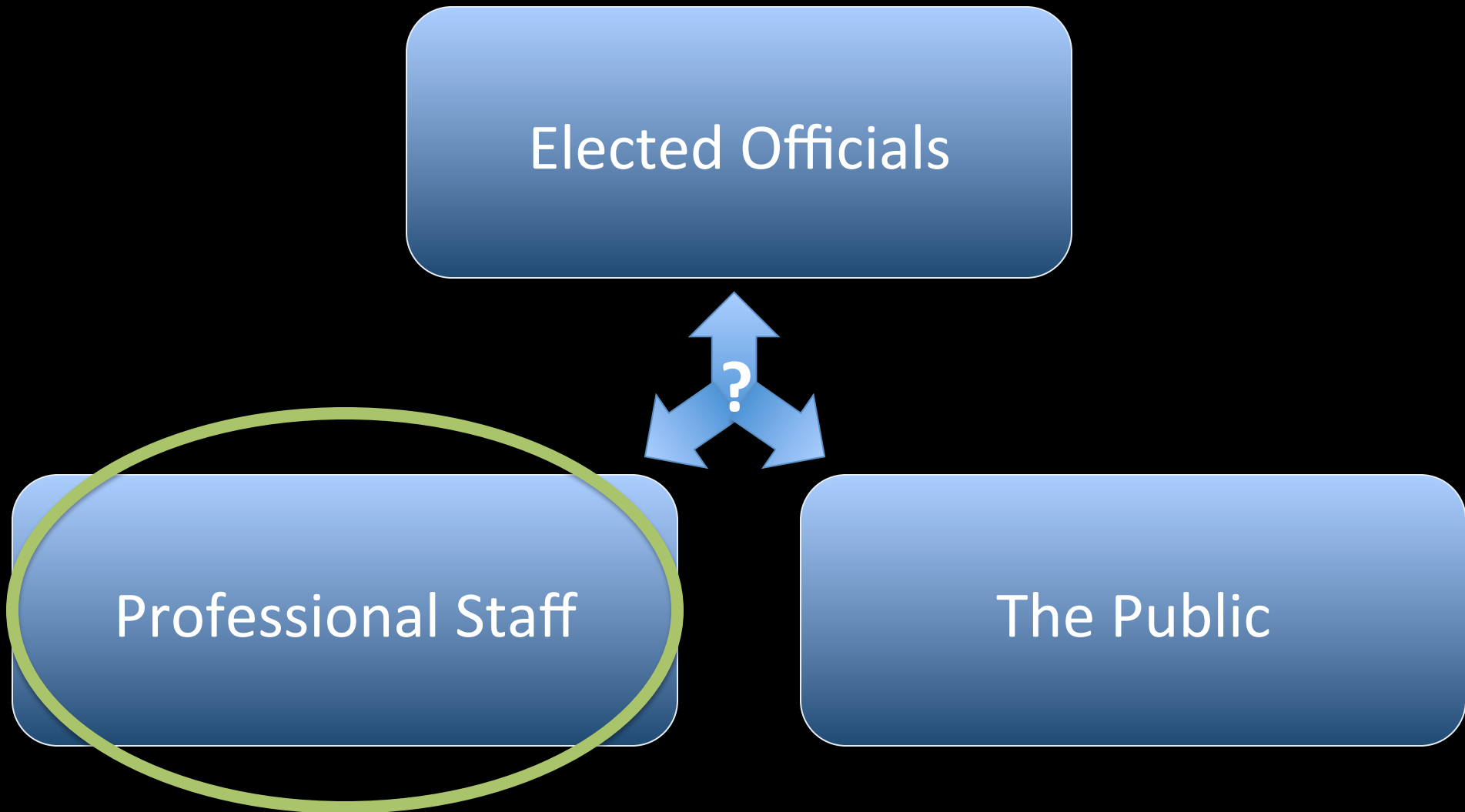
Earmarking

Congressional committee members

Administrative Grants

US DOT; Sustainable Communities
Partnership

Roles in the Process



Who Pays

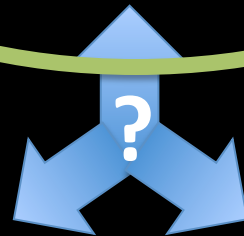
Taxes, Fees, General
Funds (federal)



Direct User Charges
(tolls, fares, etc.)

Worthy Projects

Predict and Provide
(traditional)



Smart Growth,
Sustainability,
Livability

Credit Worthiness

Modal Balance

Highways

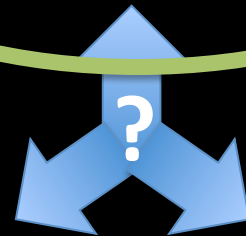
Transit



Bicycle & Pedestrian

Rail

Federal Role in Surface Transportation



“Local” – Streets,
Transit, Walk, Bike

Tax Collection and
Revenue Distribution

Financial complexity

Shifting from Cash to Finance

Grant Anticipation Revenue
Vehicles (GARVEEs)

Section 129 Loans

State Infrastructure Banks
(SIBs)

Private Activity Bonds (PABs)

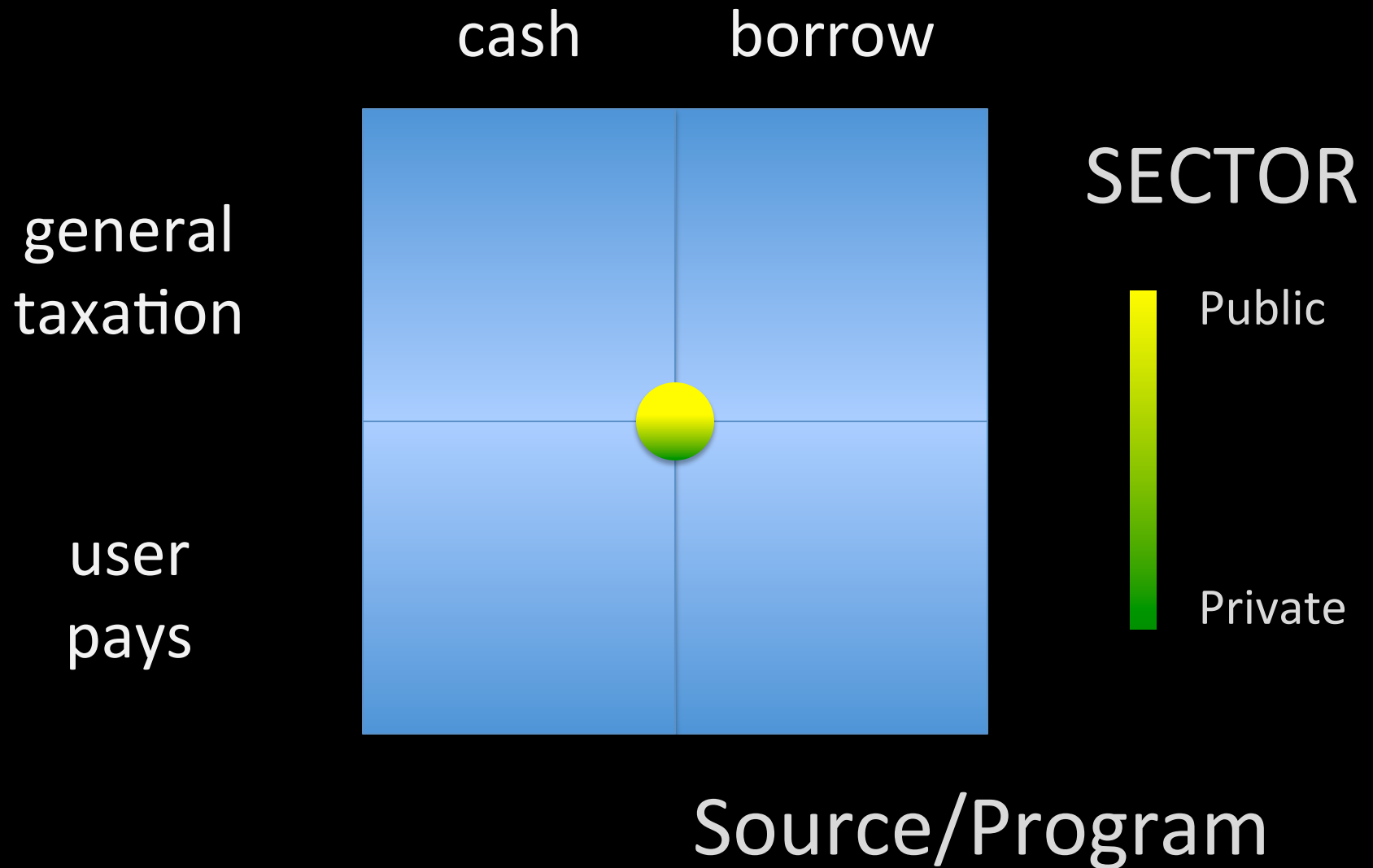
Transportation Infrastructure
Finance and Innovation (TIFIA)

TIFIA

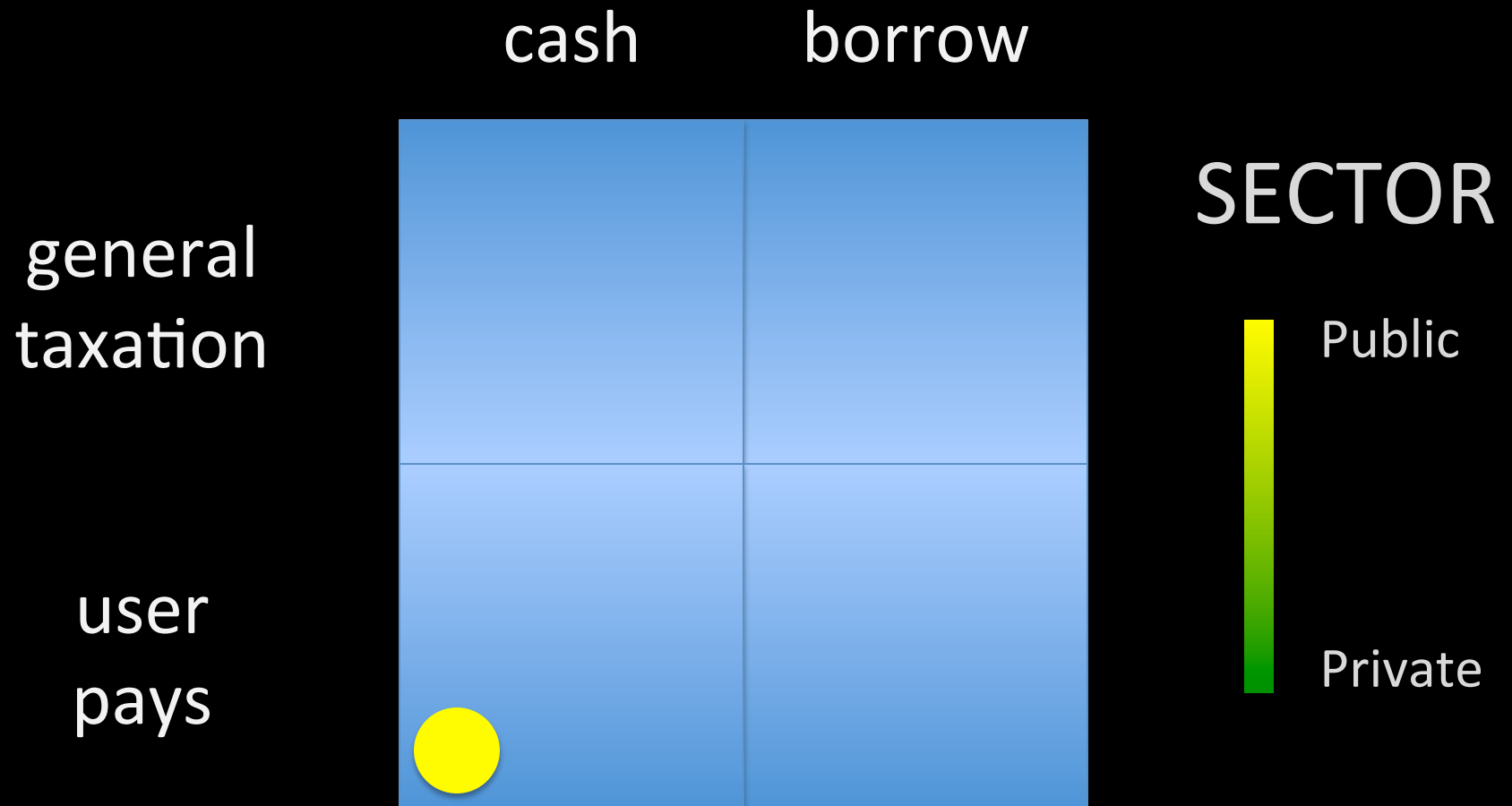
(Transportation Infrastructure Finance & Innovation)

- \$750 m in FY2013, \$1.0 b in FY2014
- Types of assistance (repaid within 35 years):
 - secured loans & loan guarantees
 - lines of credit
- Master credit agreements (stream of projects)
- Cost participation up to 49%, but DOT will prioritize at 33%
- Payback sources: tolls, user fees, PPP payments, tax increments
- Eligible projects: highways, transit, rail – must be in STIP/TIP
- Projects > \$50m generally, >\$25m rural areas, >\$15m for ITS projects, up to 10% for rural projects
- Selection criteria – first-come, first served/ “credit worthiness”??

Sources of Funds

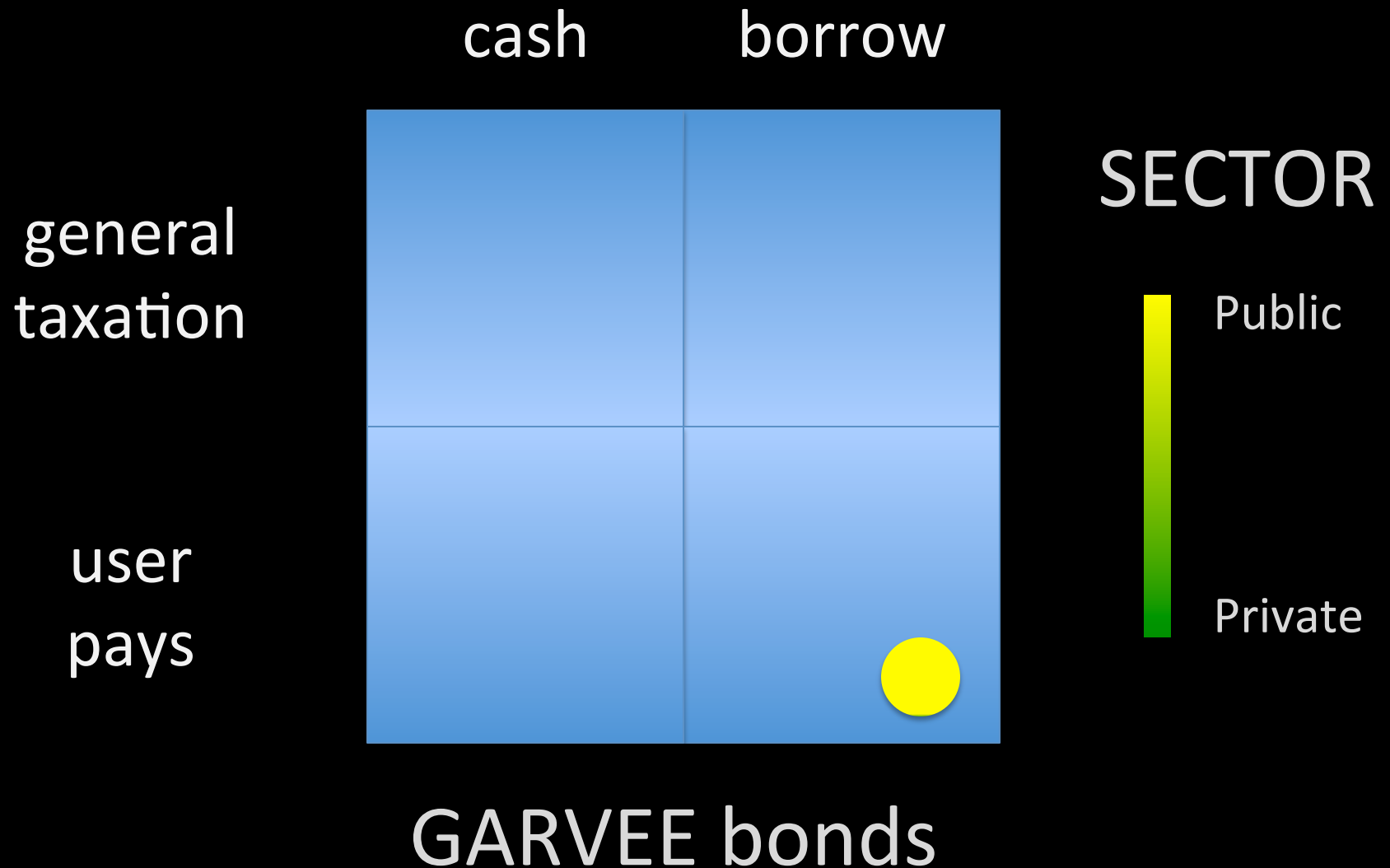


Sources of Funds - Federal



traditional surface transportation program

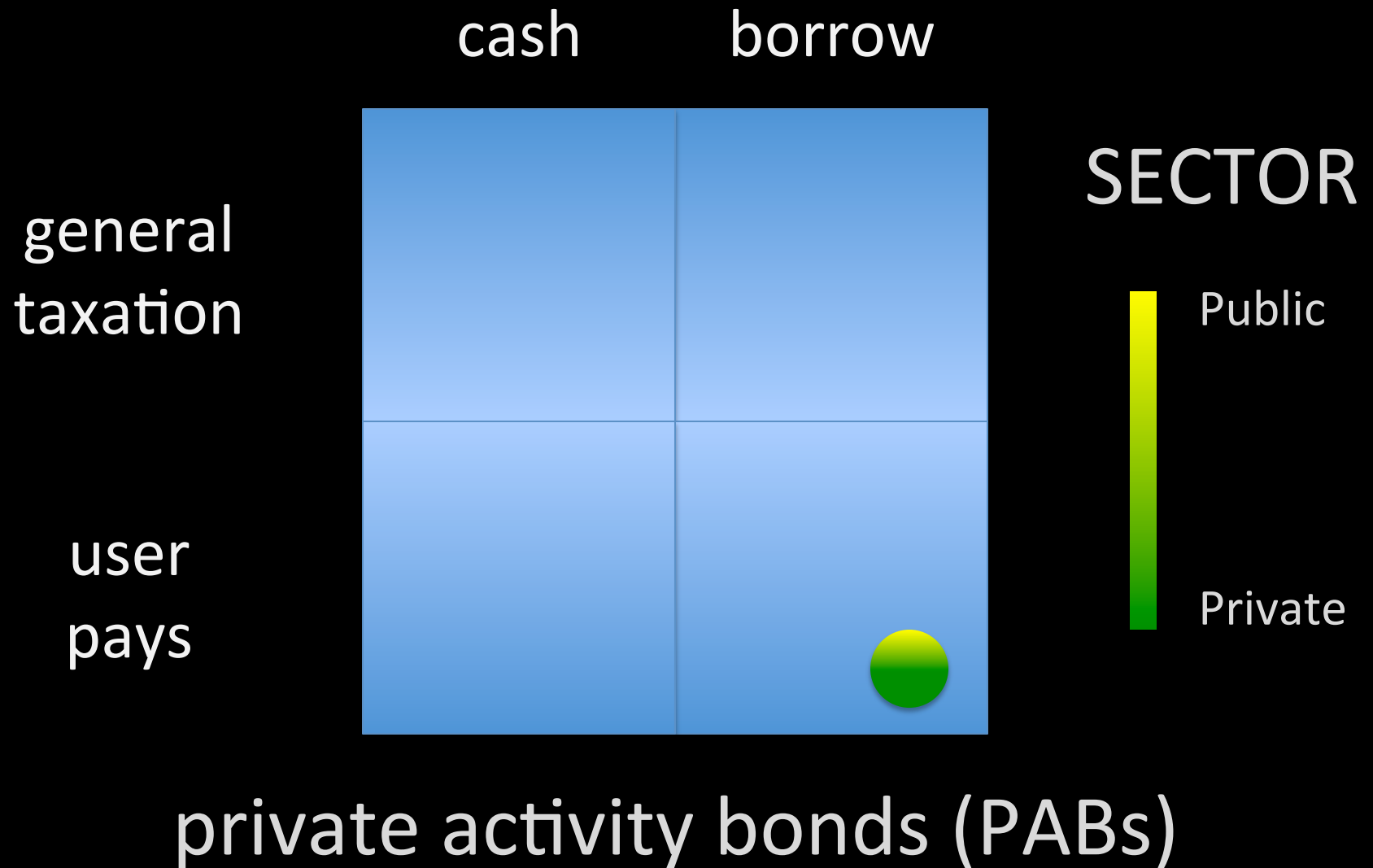
Sources of Funds - Federal



Sources of Funds - Federal



Sources of Funds - Federal



3. State Transportation Funding

Traditional state transportation funding sources

Fuel taxes

Sales taxes

Vehicle registration fees

Traditional bond proceeds

Toll and fare revenues

General funds

Other taxes and fees

Non-traditional state transportation funding sources

GARVEE bond proceeds

Private activity bonds (PABs)

Transportation Infrastructure Finance & Innovation Act (TIFIA)

State infrastructure banks (SIBs)

Section 129 Loans

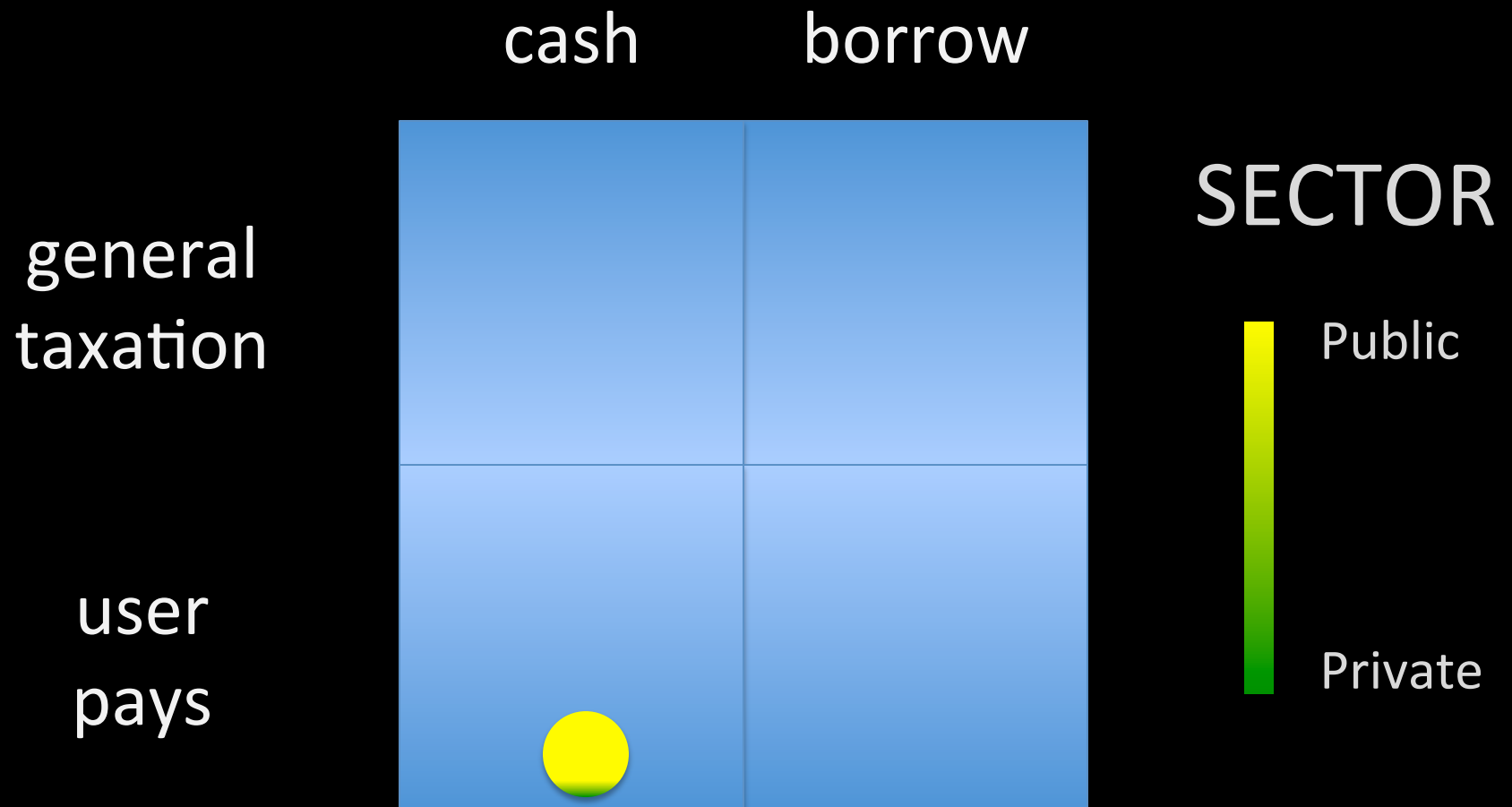
Vehicle miles traveled (VMT) fees

Public private partnerships (PPPs)

VMT (mileage) Fees

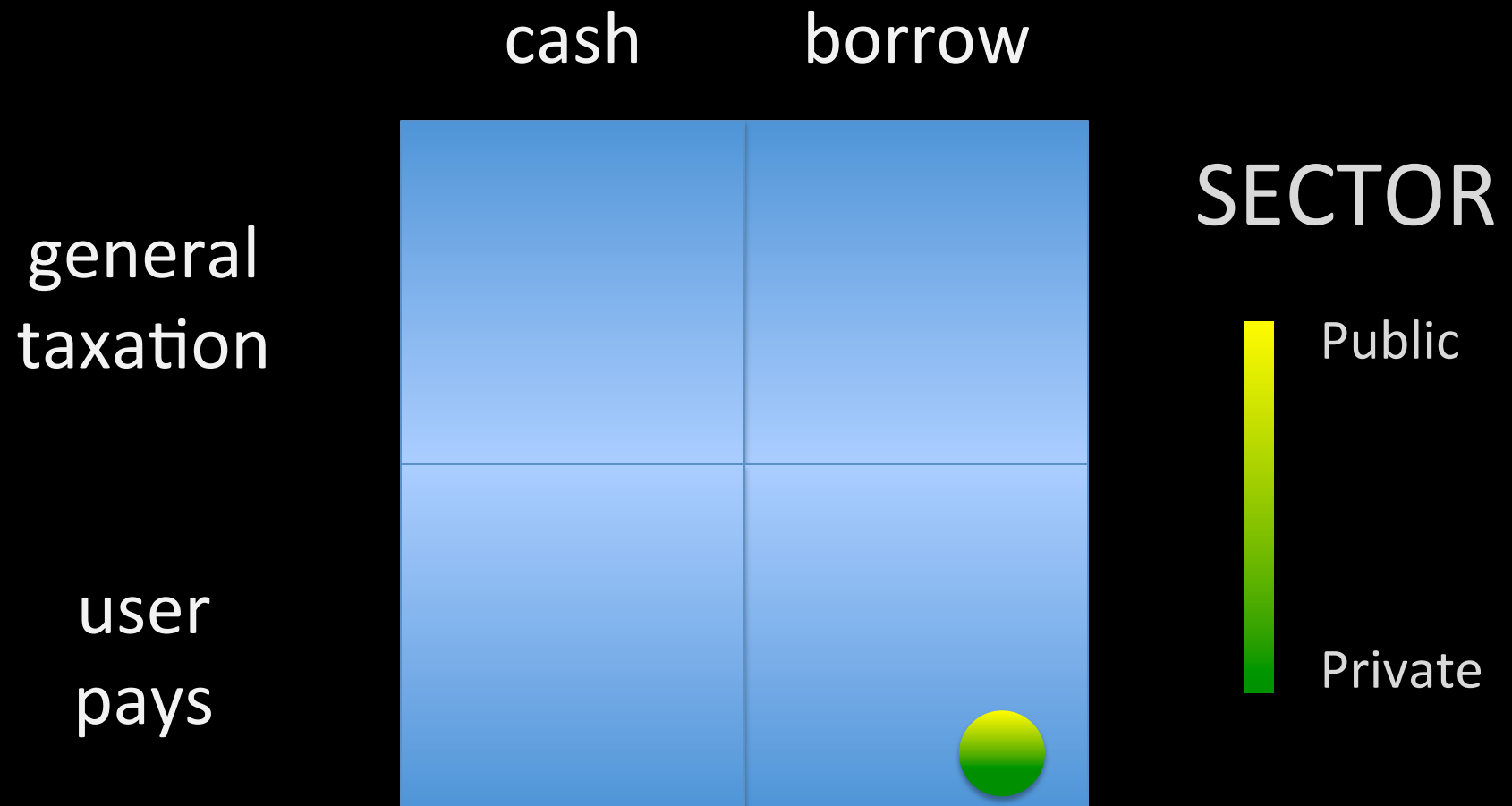
- Fee or tax for miles driven
- GPS-based (onboard)
- Can differentiate location, time of travel, facility
- Oregon Road User Fee Pilot Program
 - SB 810: 1.5¢/mile (voluntary – 5,000 drivers – July 2015)

Sources of Funds – State Revenues



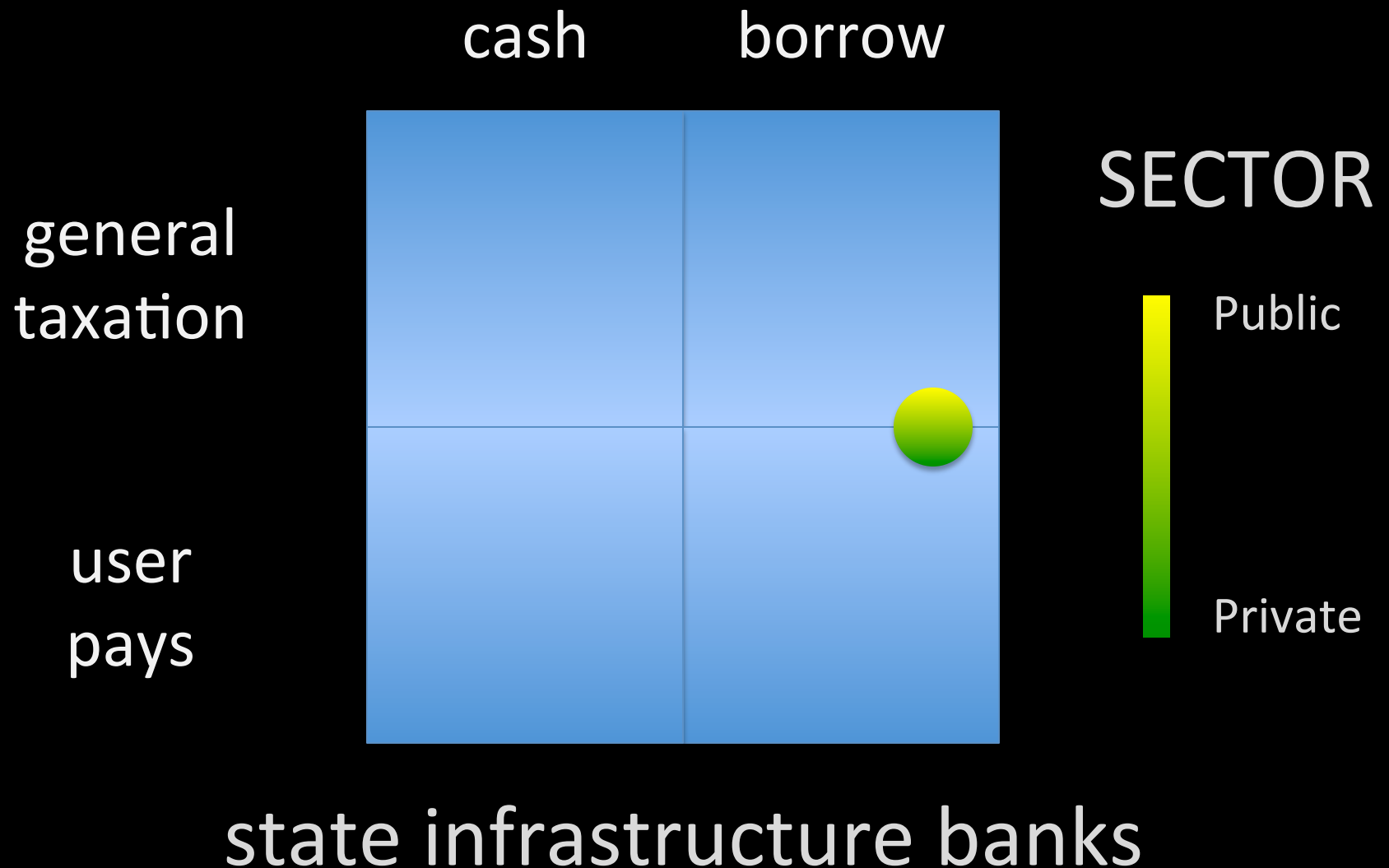
traditional gas taxes, vehicle fees, etc.

Sources of Funds – State Revenues

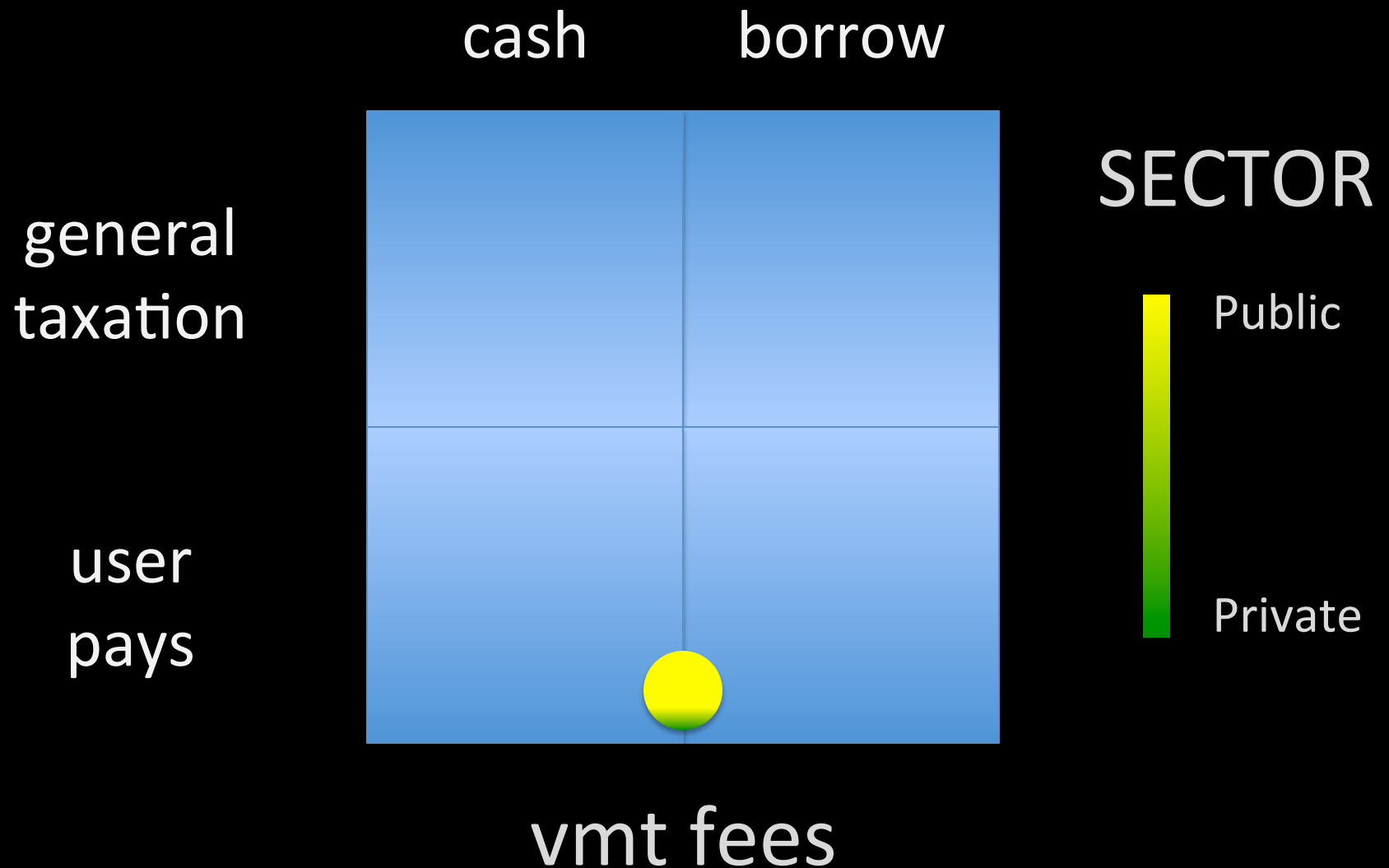


bonding associated with tolls and fares

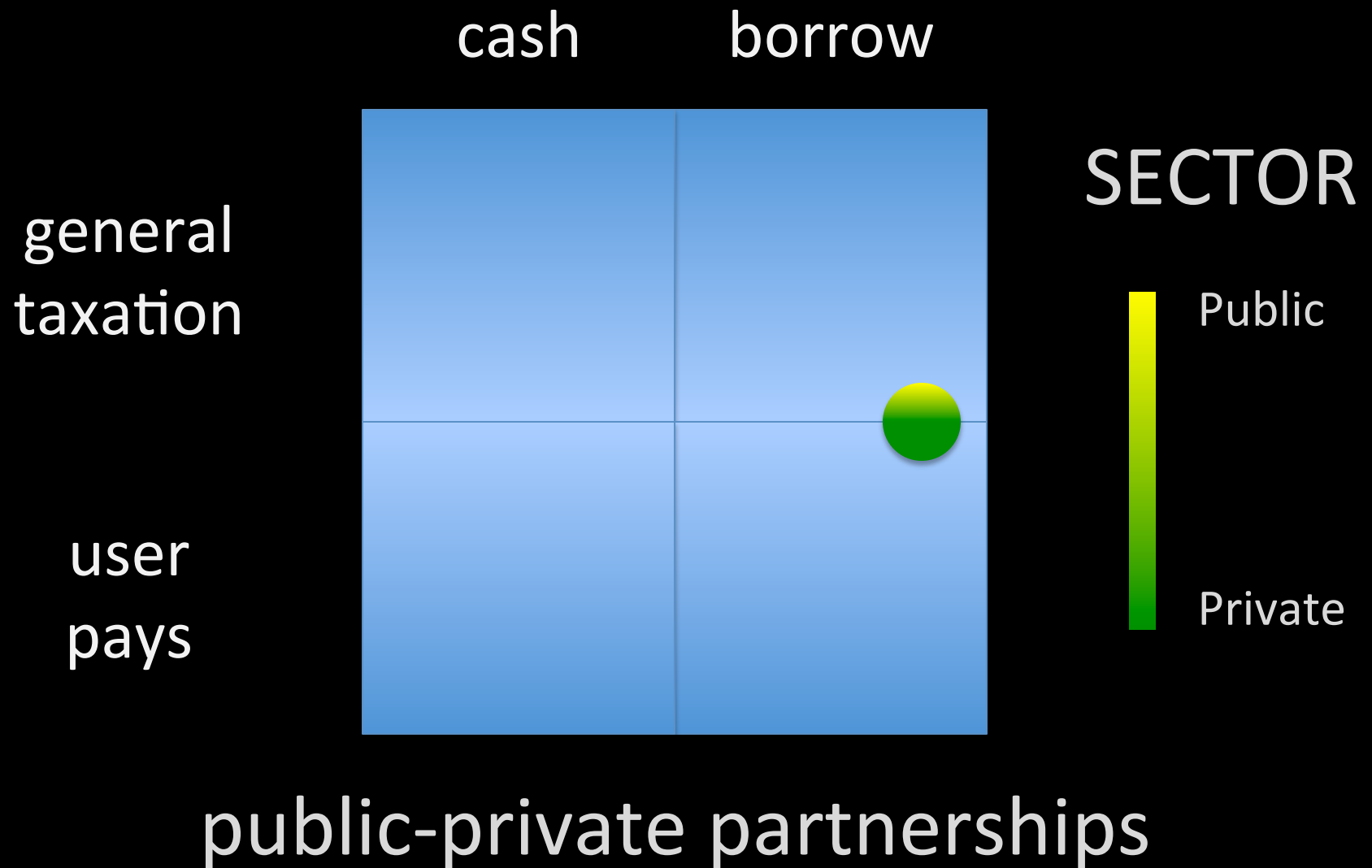
Sources of Funds – State Revenues



Sources of Funds – State Revenues



Sources of Funds – State Revenues



Recent State Initiatives

general
taxation

user
pays



Arizona

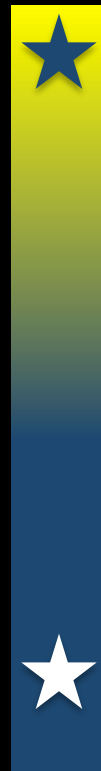
2008 sales tax
(failed to make ballot)

2013 VMT fee
(study committee)

Recent State Initiatives

general
taxation

user
pays



Maryland

2013

internet sales tax

index gas tax

new gas sales tax

wholesale gas tax

index transit fares

\$800 M

(passed and signed by
Governor)

Recent State Initiatives

general
taxation

user
pays



California

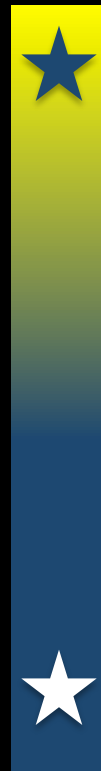
2013

increase gas tax
3.5 cents
(effective July 1, 2013)

Recent State Initiatives

general
taxation

user
pays



Virginia

2013

internet sales tax

general sales tax

real estate fees

wholesale gas tax

vehicle fees

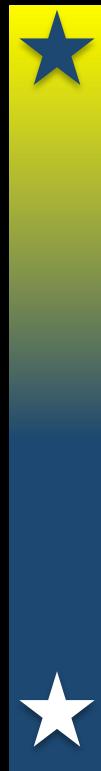
\$1.4 B

(Passed and signed by
Governor)

Recent State Initiatives

general
taxation

user
pays



Indiana

2013

metro transit

district income tax

(passed, awaiting
signature by Governor)

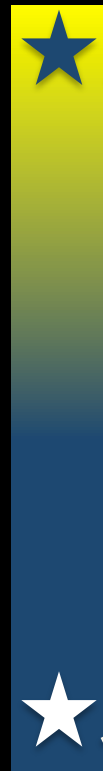
gas tax increase

(in discussion)

Recent State Initiatives

general
taxation

user
pays



Massachusetts

2013

\$1 cigarette tax
sales tax on computers
3¢ increase in gas tax

\$500 M

(passed, vetoed,
overridden, effective in
August)

Recent State Initiatives

general
taxation

user
pays



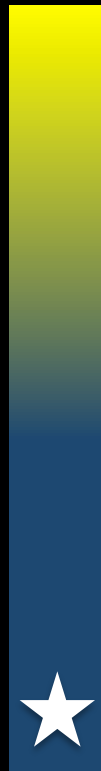
Oregon

2012-13
VMT fee pilot

Recent State Initiatives

general
taxation

user
pays



Washington

2013

electric car fee
(effective Feb 2013)

tolls, gas tax,
VMT fees
(under study)

Recent State Initiatives

general
taxation

user
pays



Wyoming

2013

raise gas tax 10¢
(passed, signed by
Governor, effective
February 2013)

4. Implications

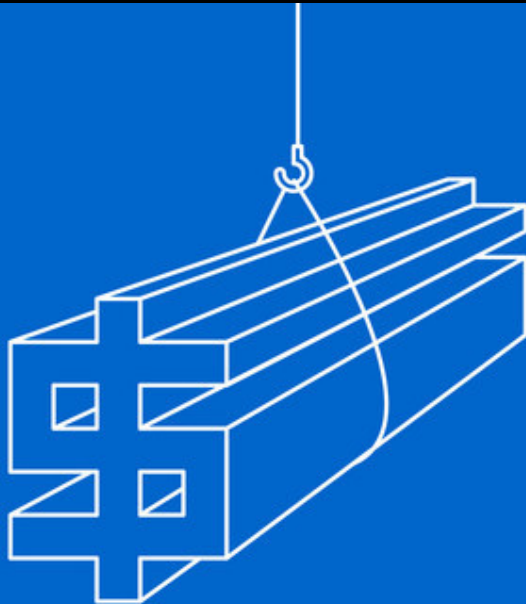
*historic
bi-partisan
support for
infrastructure
may be gone*





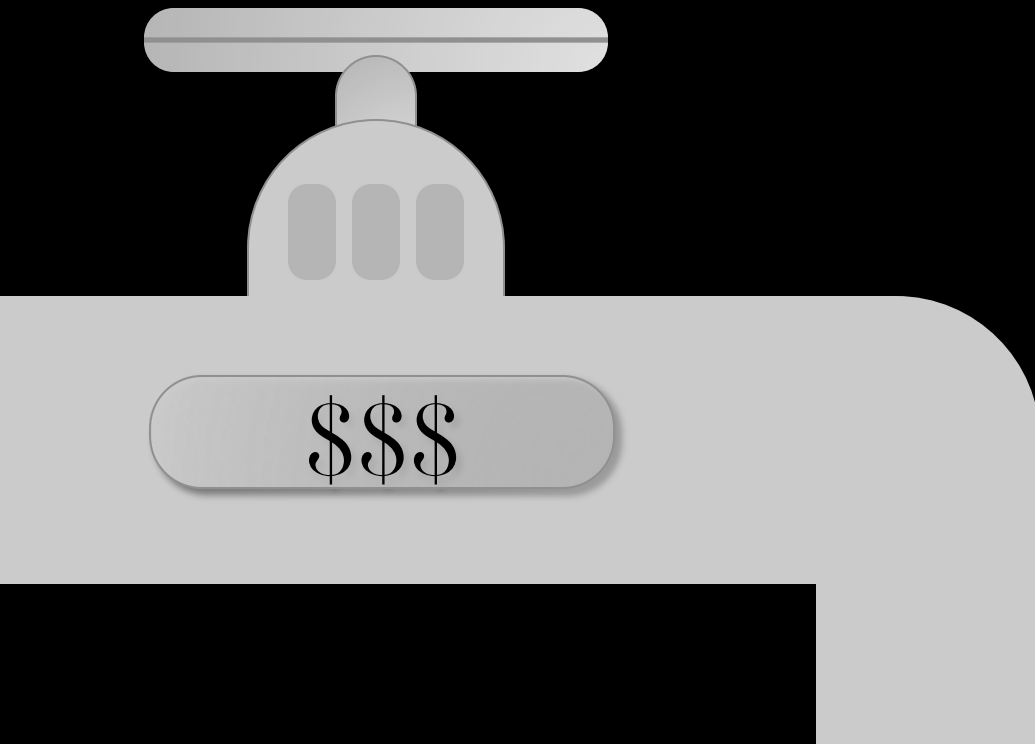
*federal role
may be
reduced to
banking and
policy*

*states may
shift toward
debt financing,
user fees &
PPP deals*



*states may be
more interested
in state impact
fees*





*it's about
more than
money...*



travel patterns

development patterns

economic viability

5. Colorado Case Study – value capture for transit

Value Capture Funding for Transit

- Value Capture - Not a new idea.
 - 1978 Study - “Windfalls For Wipeouts: Land Value Capture and Compensation” (Hagman and Misczynski) :
 - Public infrastructure investments produce windfalls for private property.
 - These can could be captured by cities (or other public agencies) through taxes or fees tied to the increase in land value.

Familiar Examples of Value Capture

- Special / Local Improvement Districts – (Special Assessments)
 - ❑ Used for a variety of infrastructure & other improvements
 - ❑ Used for both Capital & O & M.
- Tax Increment Financing (TIF) via URA.
 - ❑ Often, however, a form of reverse Value Capture
 - ❑ Increasingly controversial as other taxing entities are deprived of the PTI.

Examples of Value Capture

Special Assessments for transit :

- ❑ Los Angeles: Metro Red Line subway (1993)
- ❑ Portland: Streetcar – a LID funded ~ 17% of the first phase; ~20% for subsequent phases.
- ❑ Seattle: South Lake Union Streetcar (2007): LID covered 50% of capital costs.
- ❑ Tampa: TECO streetcar line.
- ❑ Fairfax Co, VA: Metro Orange Line ext., Dulles Rail Transit Improvement District*
 - * limited to 8 Tysons Corner properties, <6% of project costs

Evaluating Benefits of Transit for Value Capture

1998 study of residential prices in So. California: Buyers would have to add 15 to 30 minutes to a daily commute in order to reduce a home purchase price by \$10 to \$15 per sq. ft.

i.e. (“Drive to Qualify”)

(Dunphy, 1998)

Transit's Premium Effect on Residential Prices

<u>Variable/Location</u>	<u>Effect</u>	<u>ResType</u>	<u>Transit type</u>
San Francisco Bay Area- BART System	+17% w/in 500 ft of stn.	SF	Rapid Transit
San Diego Trolley System	+2% w/in 200 ft of stn.	SF	Light Rail
Portland - MAX Light Rail System	+10.6% w/in 1,500 ft of stn.	SF	Light Rail
Sacramento Light Rail System	+ 6.2% w/in 900 ft of stn.	SF	Light Rail
Santa Clara Co. - VTA Light Rail	-10.8% w/in 900 ft of stn.	SF	Light Rail
Santa Clara Co. - VTA Light Rail	+45% w/in 1,320 ft of stn.	Rental	Light Rail
Chicago- METRA Commuter Rail System	+20% w/in 1,000 ft of stn.	SF	Commuter Rail
St. Louis MetroLink Light Rail System	+32% w/in 100 ft of stn.	SF	Light Rail

Source: "Capturing the Value of Transit", Center for Transit-Oriented Development, Nov. 2008

Transit's Premium Effect on Commercial R.E.

<u>Variable/Location</u>	<u>Effect</u>	<u>Type</u>
Washington, D.C. Metrorail / Downtown Stn.	+9% w/in 300 ft of stn	Rapid Transit
Washington, D.C. Metrorail / Silver Spring Stn.	+14% w/in 300 ft of stn.	Rapid Transit
Washington, D.C. Metrorail / General	+12.3% to 19.6% w/in 300 ft of stn.	Rapid Transit
Atlanta MARTA System	+11% to 15.1% w/in 300ft of stn.	Rapid Transit
San Francisco Bay Area (BART System)	No premium effect w/in 2,640 ft of stn	Rapid Transit
BART System	+ 1% w/in 500 ft of stn. (<u>Retail</u>)	
Dallas DART Station Areas	+10% w/in 1,320 ft of stns	Light Rail
Dallas DART Station Areas	+30% w/in 1,320 ft of stn. (Retail)	
Santa Clara Co. VTA Light Rail	+15% w/in 2,640 ft of stn	Light Rail
Santa Clara Co. VTA Light Rail - <u>Downtown San Jose Stns.</u>	+120% w/in 1,320 ft of stn	Light Rail

Challenges for Value Capture

Some property owners will object to paying, because:

- ❖ They may not be positioned to benefit in any reasonable timeframe
- ❖ They may be ideologically opposed to new taxes, fees, transit, etc.
- ❖ They may feel the project will be built anyway...they can reap a windfall w/o paying (the “free ride” syndrome).

Challenges for Value Capture

Newly proposed transit stations in already-developed, denser areas provide more of a challenge for value capture.

- ❖ More complexity re. planning / land use-related issues and private/public goals.
- ❖ More parties involved.
- ❖ Aforementioned issues re. disincentives of existing property owners.
- ❖ May require mix of strategies: S.A.s, TIF/URA, Joint Development, etc.

Value Capture Strategies

...So, much of the focus of Value Capture strategies is on new development.

Benefits of Transit for Value Capture

Developers can capitalize on new Transit in several ways:

1. The transit premium: Improved marketability of new residential units, office space and other property; and higher revenues.
2. New infill development opportunities.
3. Probability of higher density allowances, entitlements
4. Greater financial feasibility of higher-density development
5. TODs often > public/private partnerships; some > direct subsidies, other beneficial neighborhood investments.

Value Capture Strategies

Because of these greater potential benefits:

- ❑ Developers are often more likely to be supportive of self-assessment (Value Capture) than existing property owners.
- ❑ The potential value that can be “captured” from new development is greater than the value measured by most of the studies that measure only the “transit premium”.
- ❑ The amount of that new value depends in part on a number of factors.

Success Factors for Transit Value Capture

- ❑ System Connectivity / Frequency
- ❑ Healthy Economy / Real Estate Market
- ❑ Supportive public policy
 - ❑ Incentives for TOD e.g. density bonuses, relaxed parking standards, etc.;
 - ❑ Good planning
- ❑ Traffic congestion

Connecting Northern Colorado by Rail

A Proposal for Developing Commuter Rail In Northern Colorado through Value Capture

Authors

Dave L. Ruble, Jr., P.E.

Roger L. Hoffmann

by

Northern Colorado Commuter Rail

a Colorado Non-Profit Corp.

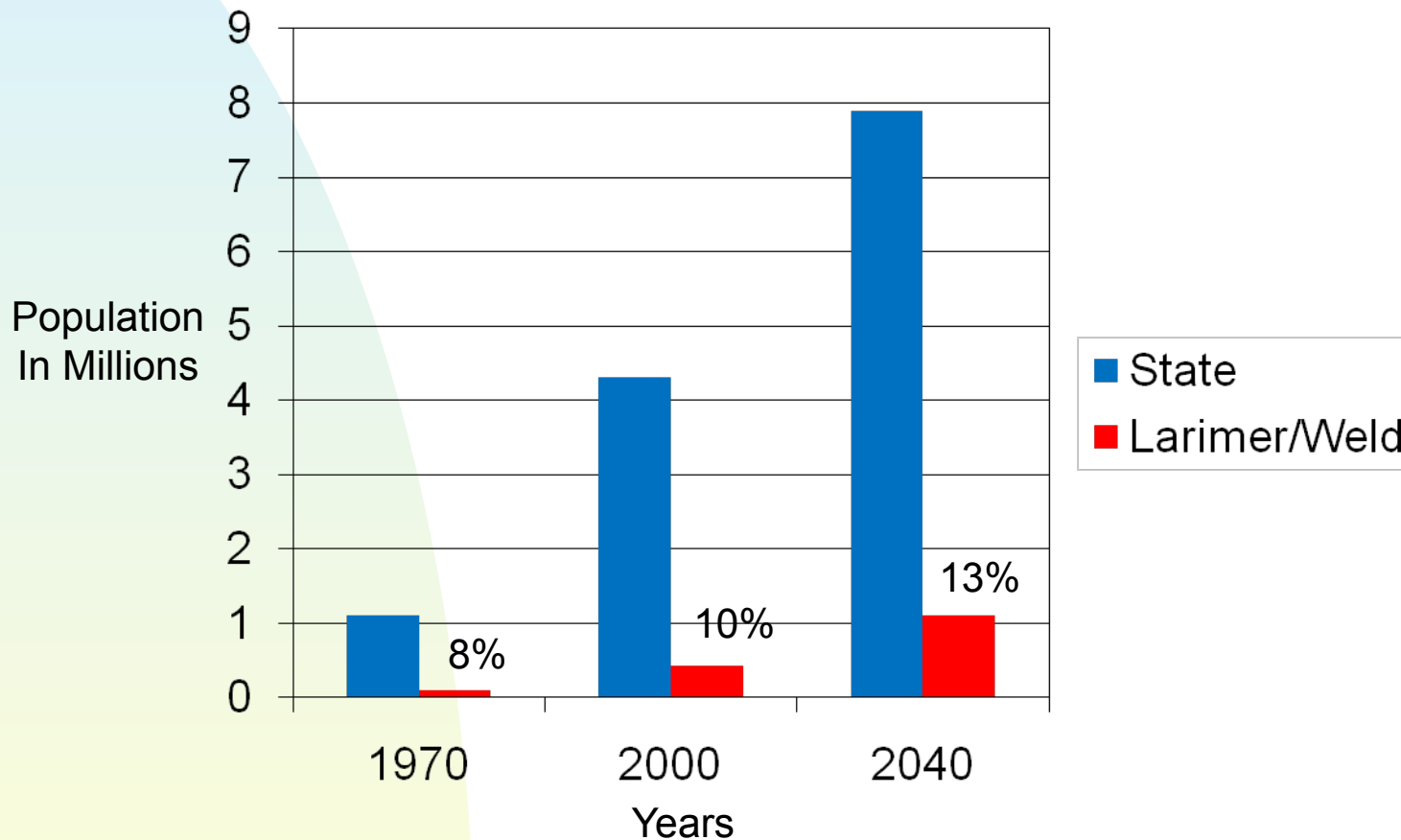


Regional Context

Political/Economic/Social Factors

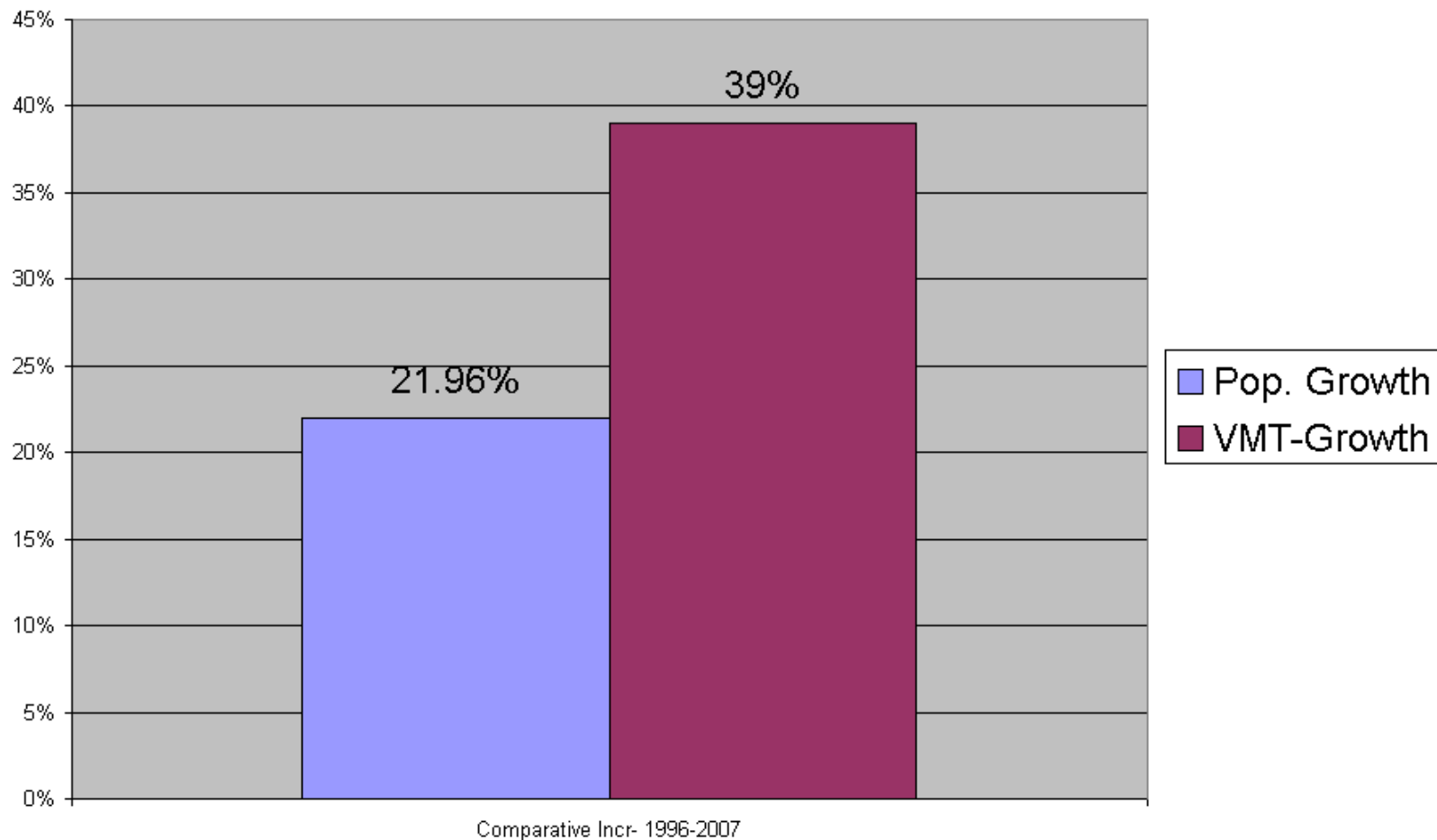
- ❑ Prolonged high pop. growth rates through in-migration.
- ❑ Rapid urbanization / sprawl – the legacy of the Wild (and Wide-Open) West.
- ❑ VMT growth exceeds Pop. Growth rates.

Population Trends (1970 to 2040)



Pop. Growth and VMT

Larimer Co. VMT Growth ~ 2X Pop Growth



Regional Context

Political/Economic/Social Factors, cont' d

- Large/Growing transportation deficits
 - > \$4 Billion for 2-county region
 - High congestion, travel times incr.

Regional Context

Political/Economic/Social Factors, cont' d

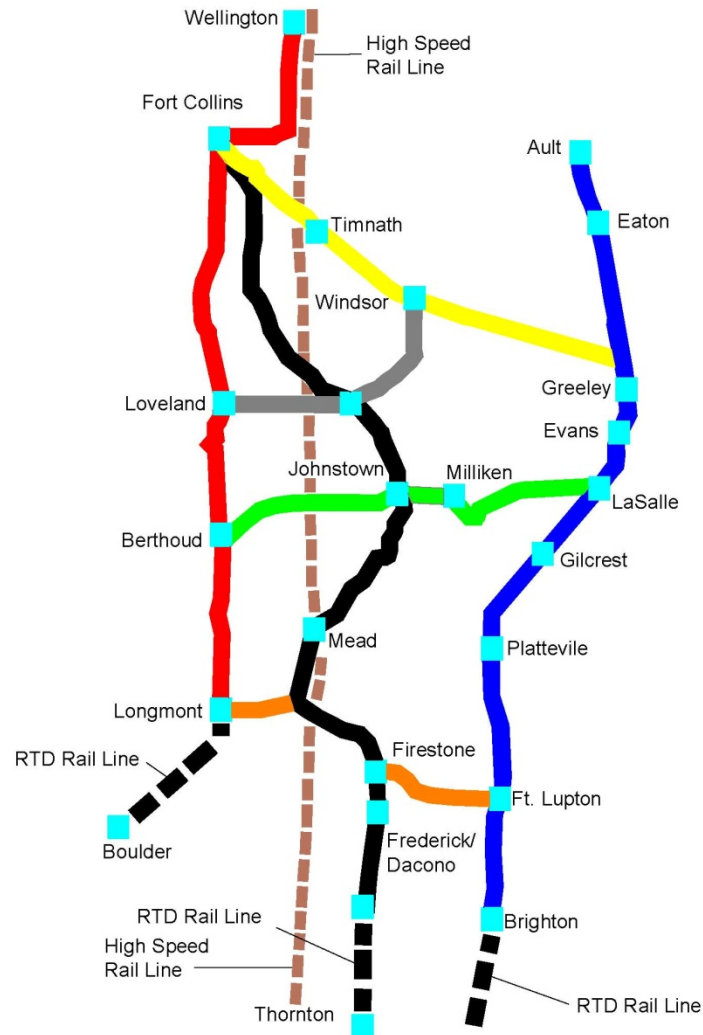
- ❑ Perceived split between Urban / Rural values and interests.
(e.g. County Secession movement)
- ❑ Parochialism makes regional planning / cooperation difficult – esp. for transit.
 - ❑ “Our (High)way or NO Way”
 - ❑ Conflicts over scarce resources (sales taxes)

Regional Context

Political/Economic/Social Factors, cont' d

- ❑ The region's towns were initially established around the railroads.
- ❑ Both younger & older urbanites seem to value transit. Recent CDOT I-25 EIS confirmed public support for commuter rail.

Proposed Commuter Rail System



w/ RTD linkages



Proposed NCCR DMU








Summary of NCCR System





- ❖ Length – 212.6 miles
- ❖ Number of Stations – 94
- ❖ Capital Cost – est. \$3.0 billion
- ❖ Operating Cost – est. \$205 - \$276 million
- ❖ Initial Technology – Diesel Multiple Unit
- ❖ Number of Vehicles – 141 to 200
- ❖ Daily Ridership – 277,100 to 384,100

BENEFITS OF TRANSIT








Environmental Benefits

-  Reduced traffic congestion
-  Reduced fuel consumption
-  Better air quality
-  Reduced sprawl
-  Conservation of open space

Fiscal Benefits

-  Reduced road and parking facility costs
-  Economic development - agglomeration efficiencies and increased productivity
-  Increased property values
-  Increased property tax revenues

Social Benefits

-  Improved fitness and health as a result of increased walking and biking
-  Reduced traffic accidents
-  Improved transportation options, particularly for non-drivers
-  Reduced consumer transportation costs
-  Expanded labor market for employers, Improved access to job opportunities for workers
-  Neighborhood revitalization
-  Reductions in wasted commuting time / Stress.

Typical Rail Station

- ❖ Number of Dwelling Units – 1,000
 - ❑ Mix of Dwelling Unit Types
- ❖ Commercial Space – 350,000 S.F.
 - ❑ Grocery Stores
 - ❑ Restaurants
 - ❑ Medical Services
 - ❑ Specialty Retail
 - ❑ Personal Care

Proposed Revenue Sources

- ❑ Bond Program - \$1.0 billion
- ❑ **Value Capture funding:**
 - ❑ CAT Fee - \$3.15 billion
 - ❑ RETA Fee - \$65.8 million/year
- ❑ Farebox - \$79.0 to \$122.7 million/year

Close Access to Transit (CAT) Fee

- ❖ One-Time Fee / All-at-Once.
 - ❑ At time a building permit is issued.
- ❖ Straw proposal (assumes no Fed, State or Local funding, no new taxes, etc.):
 - ❖ Even contribution from Comm' l & Residential
 - ❑ \$16,000 per dwelling unit
 - ❑ \$50 per sq. ft. of Commercial Space
- ❖ Offset by benefits:
 - ❑ Significant gain in value and market demand for properties near stations

Close Access to Transit (CAT) Fee

- ❖ Alternative: 50% from Value Capture with 50% Public match (Fed, State, Local)
 - ❑ CAT Fee: \$8,000 per dwelling unit / \$25 per sq. ft. of Commercial Space
 - ❑ RETA ?

- ❖ Alternative 3: “All of the above” strategy...a mix of Value Capture, conventional public revenues, TIF, etc.... Different strategies for different locations based on existing land uses.

Real Estate Transfer Assessment

- ❖ Fee assessed at the time of sale
- ❖ Flat fee or percent of sale price
- ❖ Potential Revenue Estimate
 - ❑ \$65.8 million per year
 - ❑ Based on 20% turnover rate
 - ❑ Flat rate of \$3,500 per transaction
- ❑ Could be used for both Capital & O&M

6. Q & A, Discussion

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