# A Brief History of Highways and Transportation Funding in America

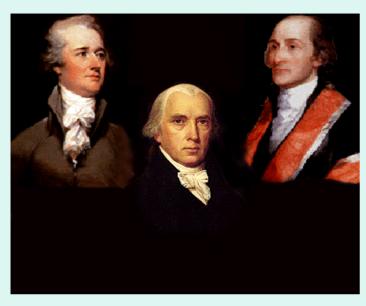




Orange County Transportation Authority (OCTA)
Board of Directors – February 25, 2008

Hamid Bahadori
Automobile Club of Southern California





### **Federalism**



### Public v. Private

**Equity** 

#### "The Road that Made the Nation"

Thomas Jefferson establishes the National Road (1806)

#### **Segment #1 (1811 – 1818)**

Baltimore through Cumberland to Wheeling 131 miles at \$13,000 per mile (initial cost was \$6,000 mile)

#### **Segment #2 (1825 – 1839)**

Ohio River to Vandalia in Illinois

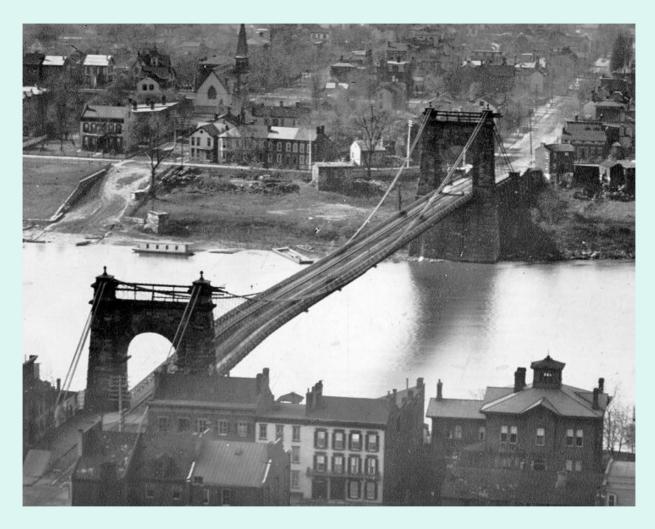
More than 4 x the length of the first segment

600 miles at \$6.8 million

#### Paid by 2% of profits from the sales of public land in Ohio



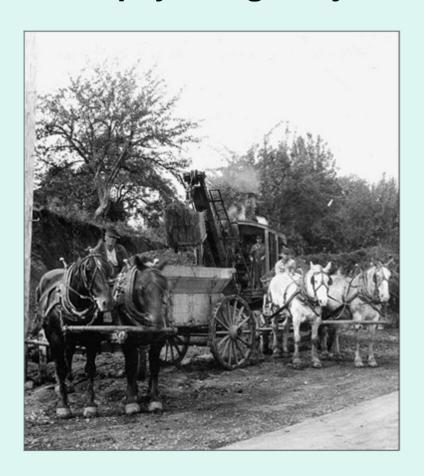
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Bridge over Wheeling Creek

## Whose road is it anyways?

#### Work, pay tax, go to jail?





Pay to turn the pike

## Turnpike Era (1792-1845)

- 11 eastern states
- 1,562 Turnpike Incorporations
- 50-70% succeeded





- \$1,500-2,000 per mile
- By 1830; \$24 Million
- 6.15% of 11 states GDPs

## Plank Roads Boom (1847-1853)



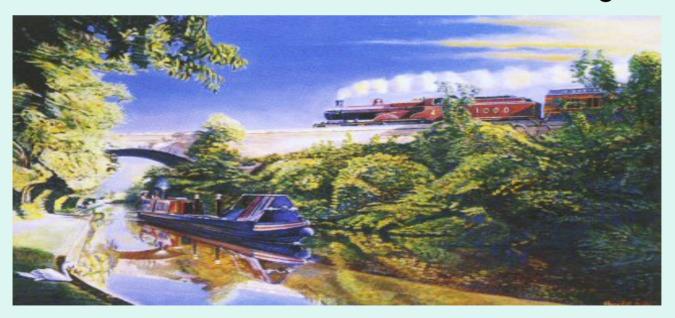


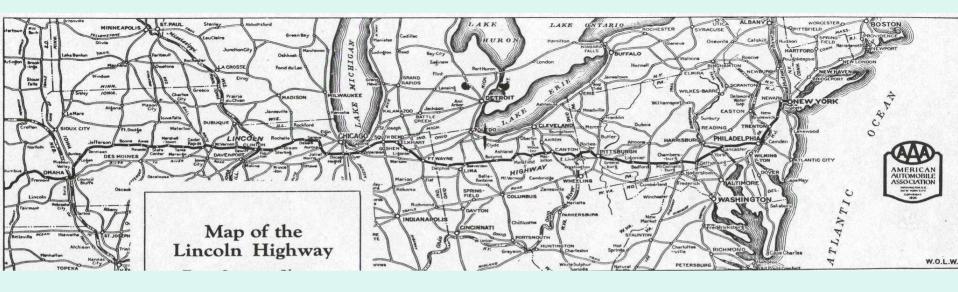


17 Eastern States
1,388 Incorporations
Smoother Surface
Better in Rain and Snow
Lasted only 4-5 years vs. 10-12 as promised

## 19th Century

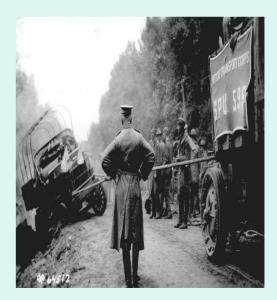
- Federal government involvement non-existent
  - State and local government activities limited
    - 5,000-5,600 private incorporations
- 30,000-52,000 miles of toll roads built, maintained, operated
- 414 in California (159 actually built and operated roads)
  - Railroads and Canals dominating





## 60 days in 1919 – DC to SF – 58 Miles a Day





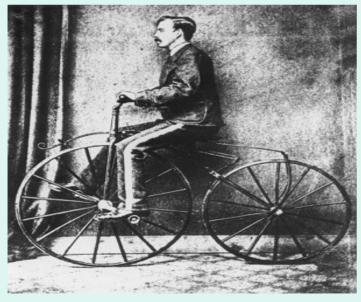
## Progressive Era Good Roads Movement

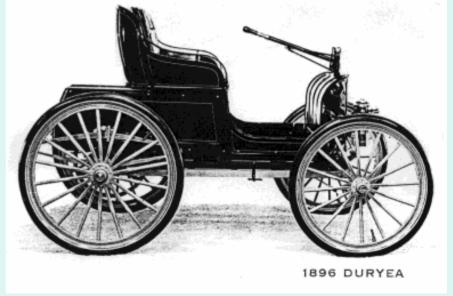
(1890-1916)





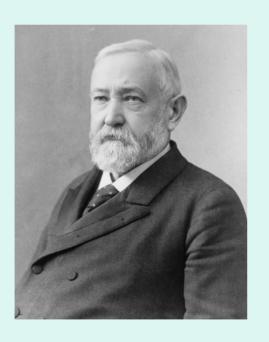


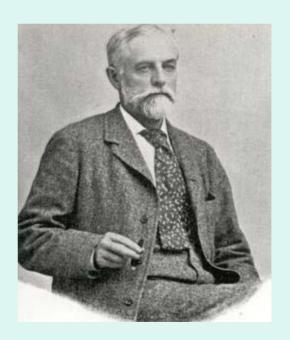




# Beginning of New Era of Federal Government Involvement (1893)

\$100,000 Appropriation and Start of *Office of Road Inquiry* 





# The First Federal Aid Highway Program (1916)



**\$75 million in matching funds over 5 years**Reimburse states 50 percent of construction costs

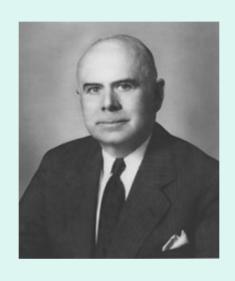
## Federal Highway Aid Act (1921)





\$75 million per year & still 50/50

## Thomas Harris MacDonald (the Chief)



"We will be able to drive out of any county seat in the United States at *thirty-five miles per hour* and drive into any other county seat – and *never crack a spring*."

## **AAA** and **AASHO**1902 and 1914









## 1905 (48,000)

## 1916 (2,500,000)

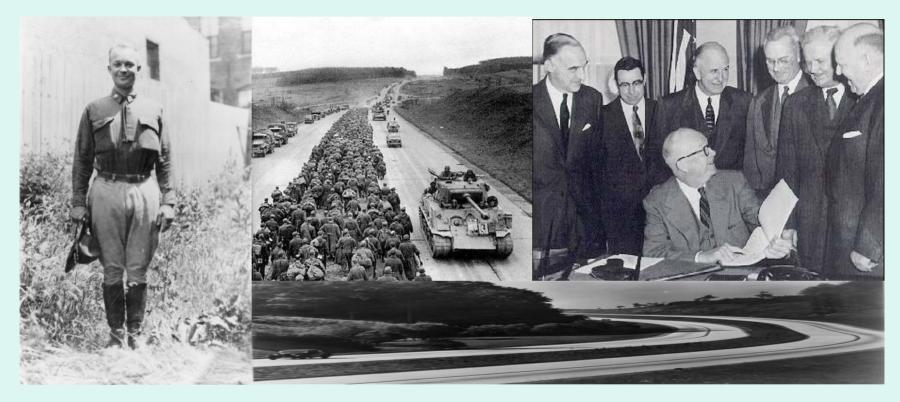








## Interstate Era (1956-1987)



"The old convoy had started me thinking about good, two-lane highways, but Germany had made me see the wisdom of broader ribbons across the land."

- Dwight Eisenhower

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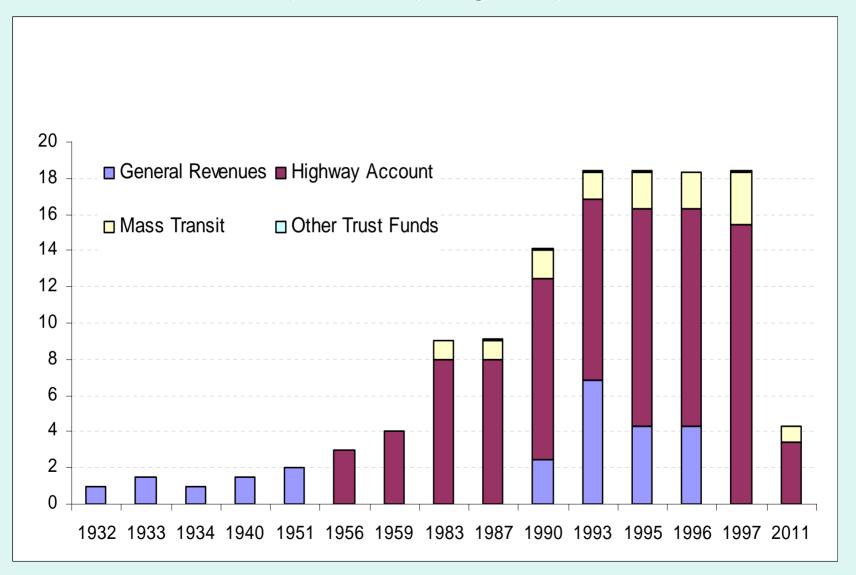
### 42,795 Miles 54,663 Bridges 104 Tunnels



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## History of Federal Vehicle Fuel Tax

(in cents per gallon)



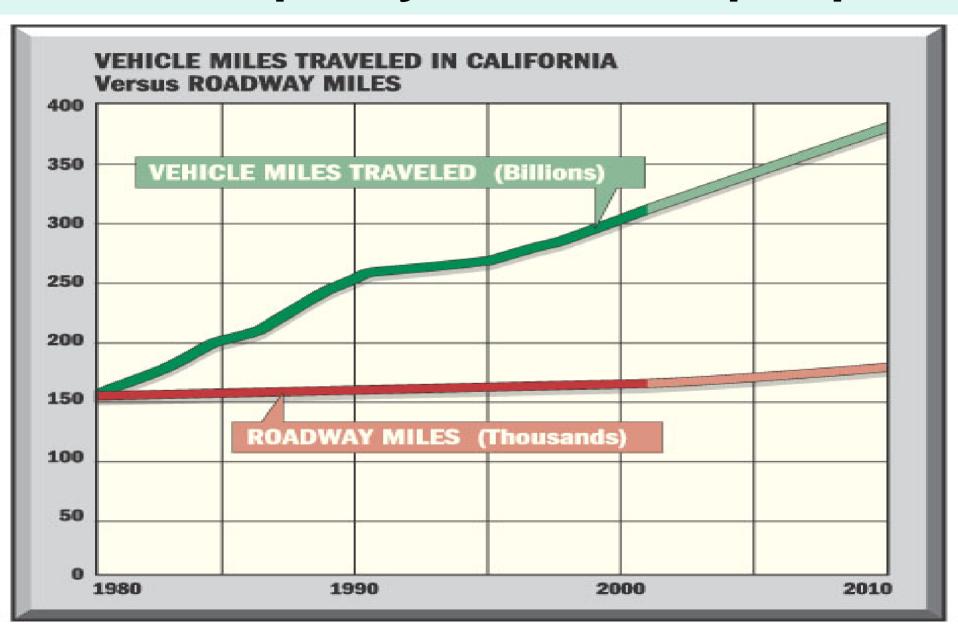
## History of Federal Vehicle Fuel Tax

(in cents per gallon)

Year	General Fund	Highway	Transit	Other
1932	1	0	0	0
1956	0	3	0	0
1983	0	8	1	0
1990	2.5	10	1.5	0.1
1995	4.3	12	2	0.1
1997	0	15.44	2.85	0.1
2011	0	3.45	0.85	0

The fuel tax has been adjusted total 14 times since its inception in 1932. It's currently set to expire in 2011.

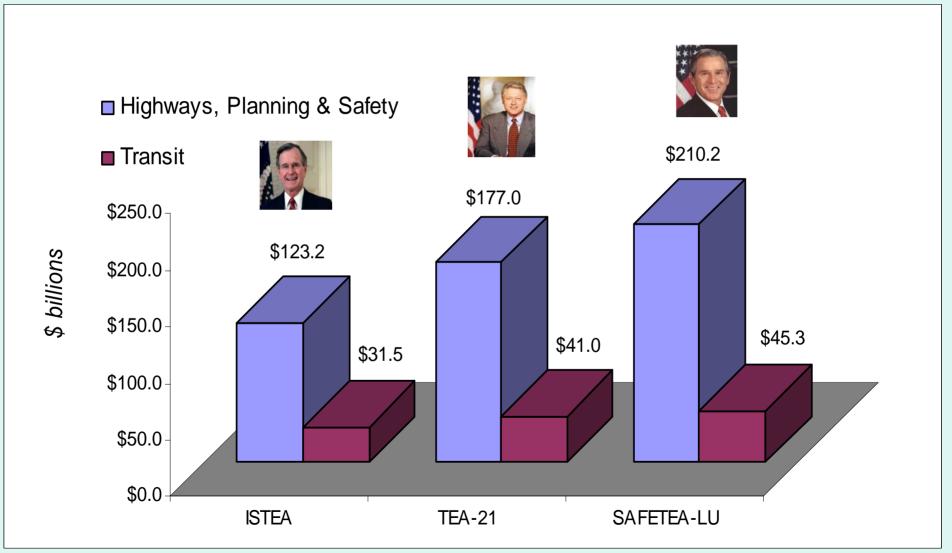
## Road Capacity Has Not Kept Up



# Highway Spending per 1,000 Vehicle Miles Traveled (in California)



#### Post-interstate Era



## Congestion

## Safety



#### The Road Ahead

- Need for more money
- Need for faster project delivery
- Looking for alternatives to fuel tax
  - VMT, Congestion pricing, PPP, etc
- Should users pay based on ability, benefits they receive or costs they impose?
- Modal balances
- Distributions (Donors and receivers)
- Users fees/taxes vs. general instruments of taxation (property, sales, etc)
- Role of federal vs. states
- The process (earmarks)





### Need for a Vision



- Voices of motorists and other system users need to be central to discussions and decisions.
- Motorists must receive direct and recognizable improvements to their travel experience.
- Transportation officials must demonstrate that they are managing resources wisely through transparent decision-making and efficient use of funds.
- Revenues generated through taxes, fees and other charges to motorists must be fair and equitable and should be dedicated solely to meeting identified transportation needs, and should be supplemental not substituting current funding levels.
- We cannot approach the future with the mindset that we can simply repeat, or re-authorize, what we have done in the past.