



# The Economic Implications of Inertia

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# Economic Implications of Inertia

- Direct relationship between transportation and economic vitality
- Highways are a prime factor in econ. effect
- A transportation crisis is imminent
- Large and multifaceted cost of delay
- Inertial components
- Global competition

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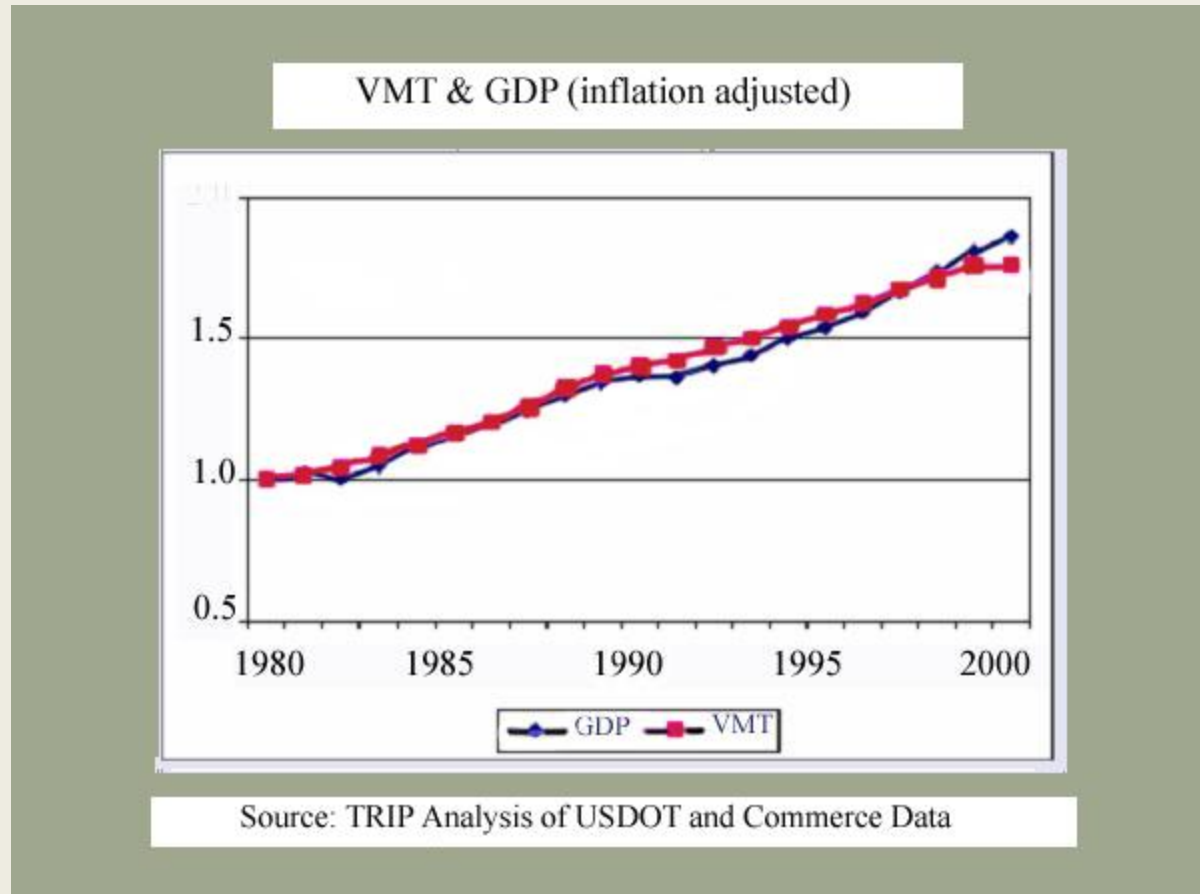
# Transportation and the Economy

- Research abounds
- TRB, Universities, AASHTO, USDOT
- National Research Council
  - 10% travel time reduction = 2.5% reduction in cost
  - Chicago - \$980 million annually
  - Philadelphia – \$240 million annually
  - Imagine the U.S.

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# How VMT & GDP Relate





# Highway Economic Impact Goods Movement

- 83% value of goods shipped are by truck
- 62% of the tonnage
- 1993-1997 – 20.6% tonnage growth
- NAFTA
- Deregulation
- Just-in-Time, retail and manufacturing
- Truck traffic to double by 2025, AASHTO

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# Highway Economic Impact

## Automobile Travel

- 79.6% of U.S. GDP is services based, not industry or agriculture
- Services require timely use of automobile
- We register more drivers, buy more cars (1.1/reg. driver) and we drive more
- Shopping, school and recreation uses grow
- Transit pass. trips 12.4 % 1960, today 4%
- Vehicle ownership 50% > western Europe
- India, paying 46 times per capita income

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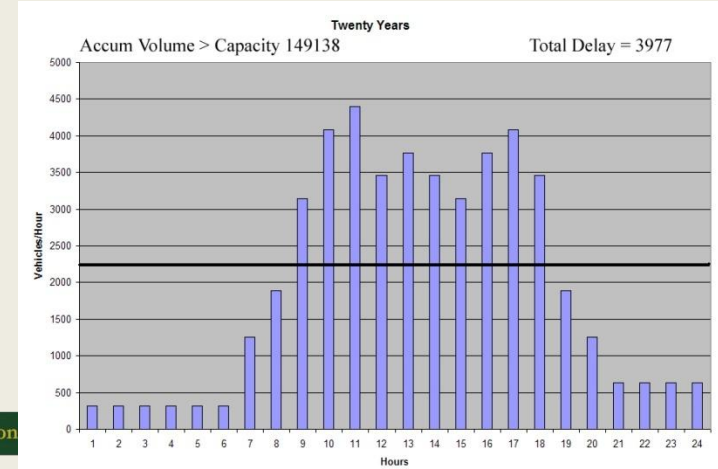
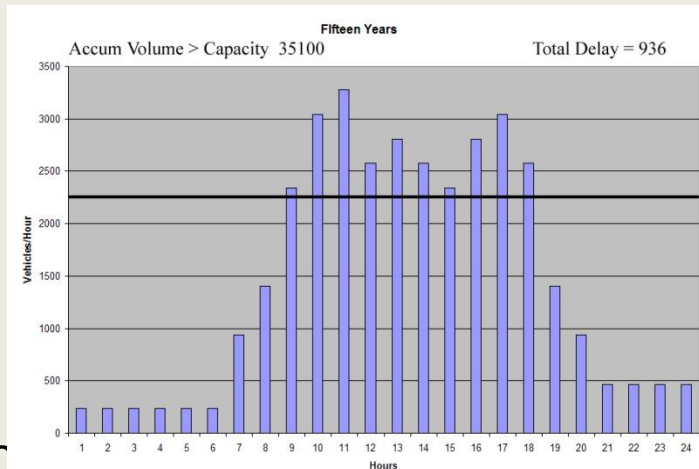
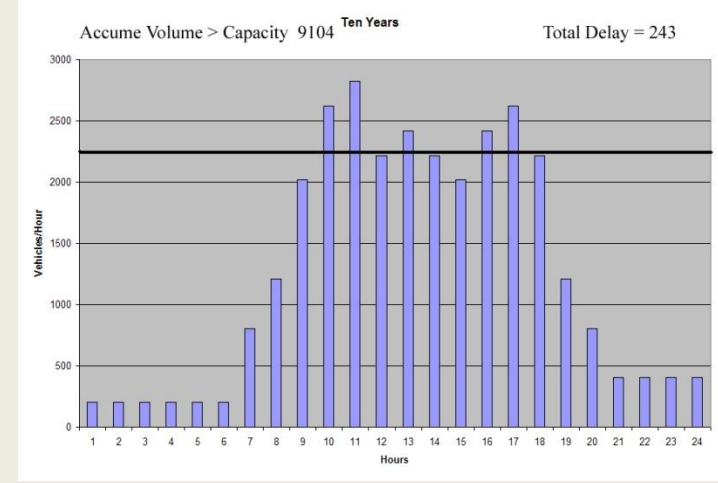
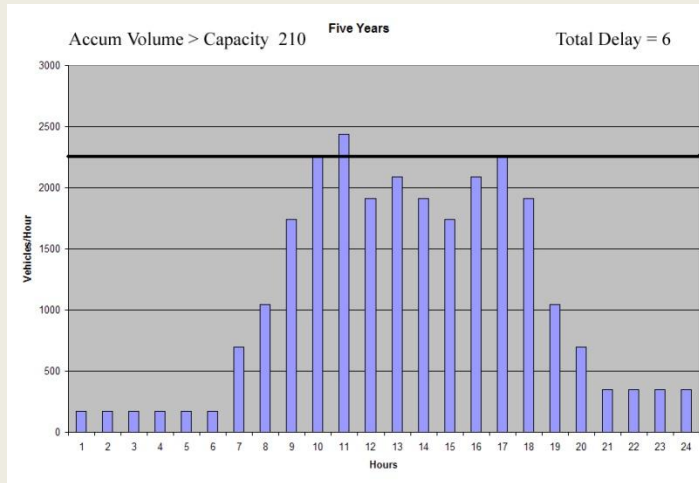
# Congestion is Nonlinear

- Hypothetical greenfield roadway
- Annual traffic growth 3%, last 20 yrs.
- On the first day, no congestion
- Over 20-30 years, development occurs
- Slowly drops from LOS A to B then a little faster to C,D and finally F
- Once it leaves LOS A the process becomes nonlinear

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# Congestion Growth Scenario



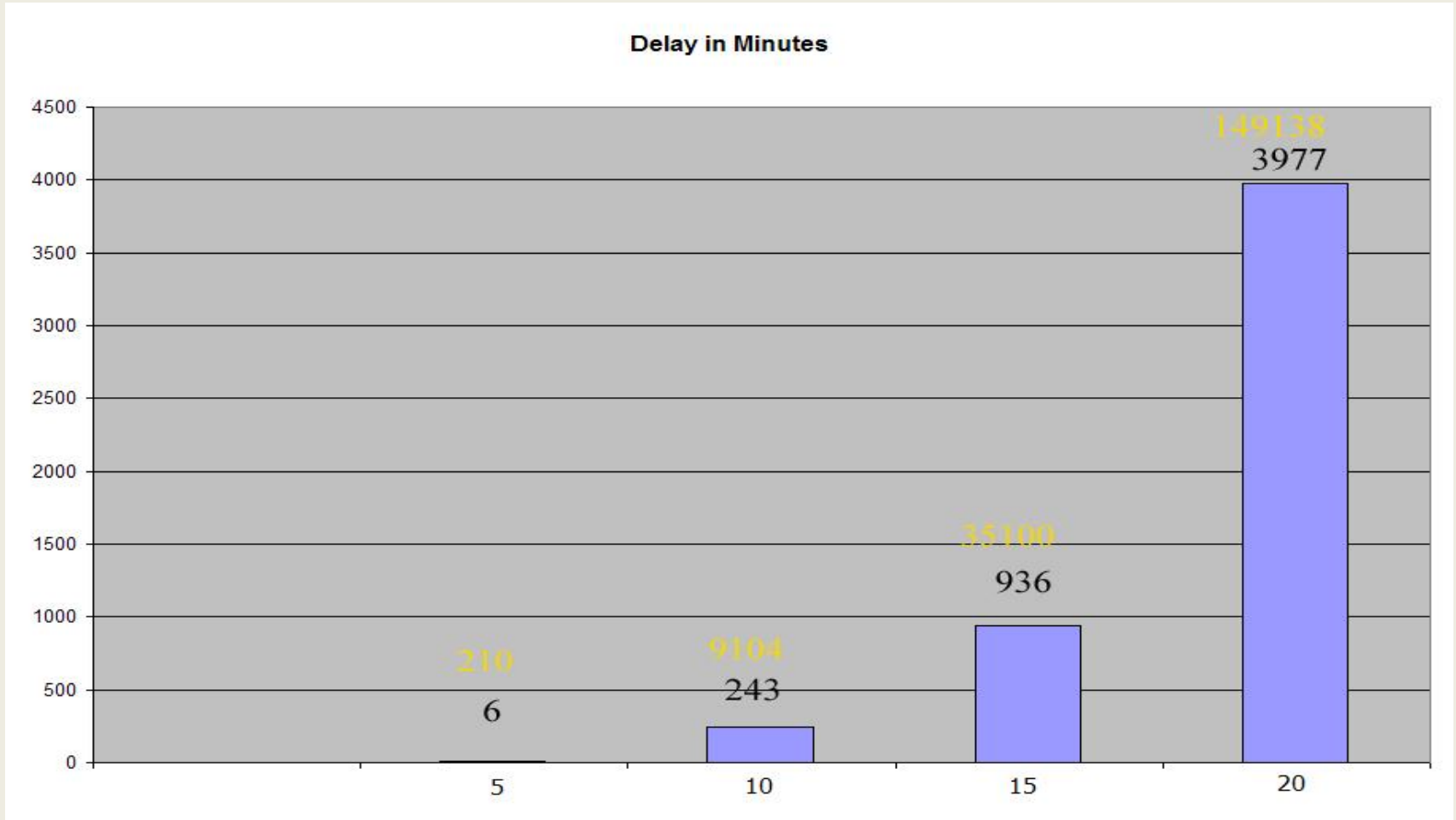
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# Delay Growth



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# Cost of Congestion

## Texas Urban Mobility Study

- More congestion, longer period of time, over a larger portion of the system
- Delay/traveler grew 16 hrs (82) to 62 hrs (00)
- \$67.5 B annually, cap exp all levels of gov't on highways 2002 \$60 billion
- Economic impact is greater than cap exp hwys
- 3.6 B hrs. delay, 5.7 B gal. gas wasted
- To keep congestion from growing AASHTO estimates \$2 Trillion needed over next 20 years

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# Interstate System

- 1956 to present, much of mileage built before 1980
- Has had twenty years to mature
- Alternatives and particularly the arterial network is becoming congested
- Hypothetical highway is the Interstate

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# Inertia

- Political will
  - To tax, toll etc.
  - Earmark growth (539-6500)
  - Allocations of federal funds
- Time required to develop projects
- A system built on allocating rather providing for needs
- A socio/politico/economic inertia based on “free” roads and allocation

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# Costs of Inertia

- Economic
- Inflationary
  - Compounding impact
- Competition for resources
  - Steel, cement, asphalt
  - Construction resources
- Quality of life

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# Loss of Global Competitiveness

- China (trans, energy & education)
  - 8<sup>th</sup> five year plan
  - 40,000 km limited access
  - Growth in urban affluence
  - Cars in Beijing
- European Union (trans, E/W econ growth)
  - Concessions, rail, seaports (white paper)
- What is the U.S. plan?

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# Bold Transportation Plan

- Fundamental changes are necessary - not incremental
- Bold plan is needed
  - Transcontinental railroad
  - Interstate highway system

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# Transportation Plan Focus

- Intermodal system with a focus on arterial highways
- Create a connection between price and use
- Rearrange public and private sector relationships
- Apply technology that exists today
- Use private capital

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# Summary

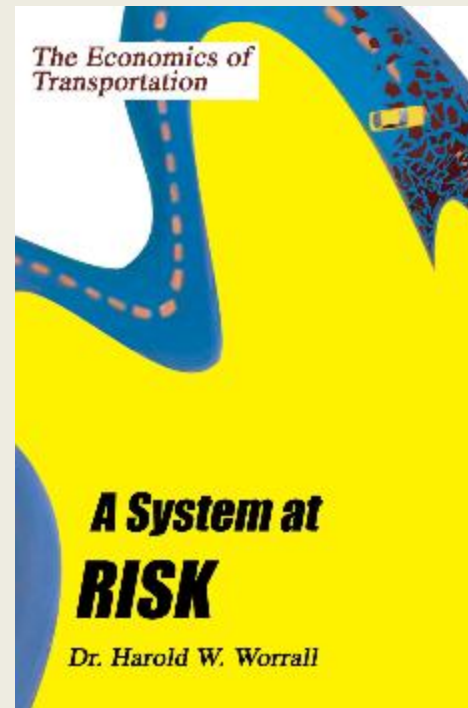
- There is a strong relationship between transportation, especially highways, and economic vitality
- Crisis is coming soon
- The costs are high
- Prescriptions exist
- Requires political will

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- Available at:
  - [luniverse.com](http://luniverse.com)
  - Amazon
  - Barnes and Noble
  
- Thank you!



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