



# Urban Mobility Issues in a Rural? State

Texas Chapter Fall 2018 Meeting  
American Society of Farm Managers and  
Rural Appraisers

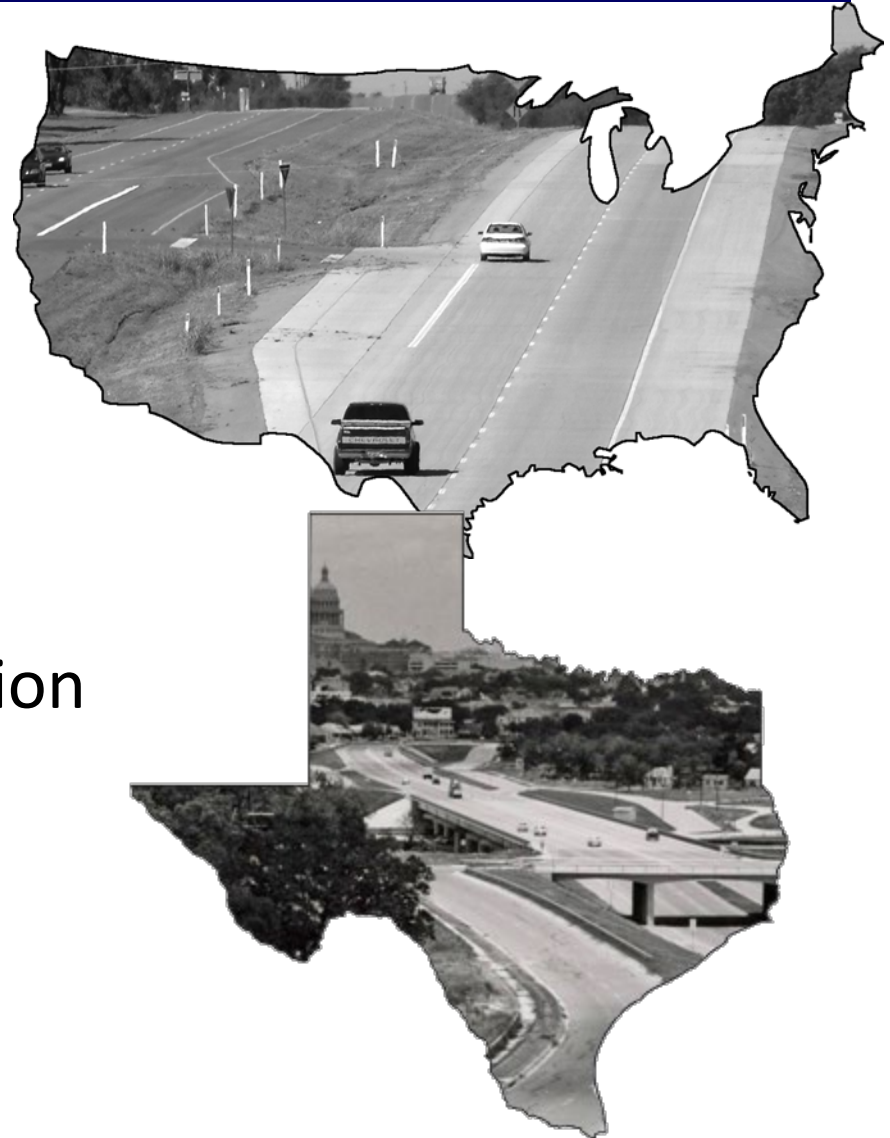
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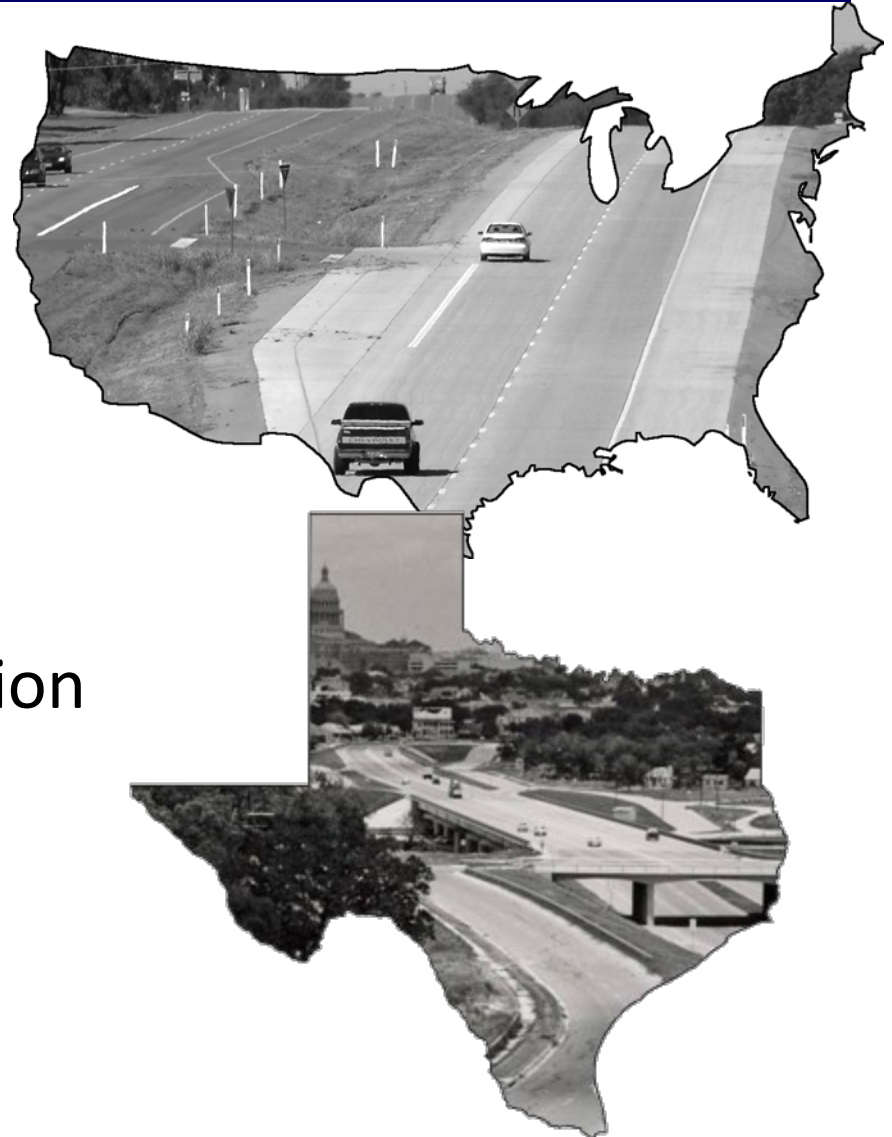
# Accepted Truths ?

- Once upon a time the U.S. had the most efficient transportation systems in the world.
- Texas had one of the most efficient transportation systems in the U.S.



# Accepted Truths ?

- Once upon a time the U.S. had the most efficient transportation systems in the world.
- Texas had one of the most efficient transportation systems in the U.S.
- **Both are in jeopardy**



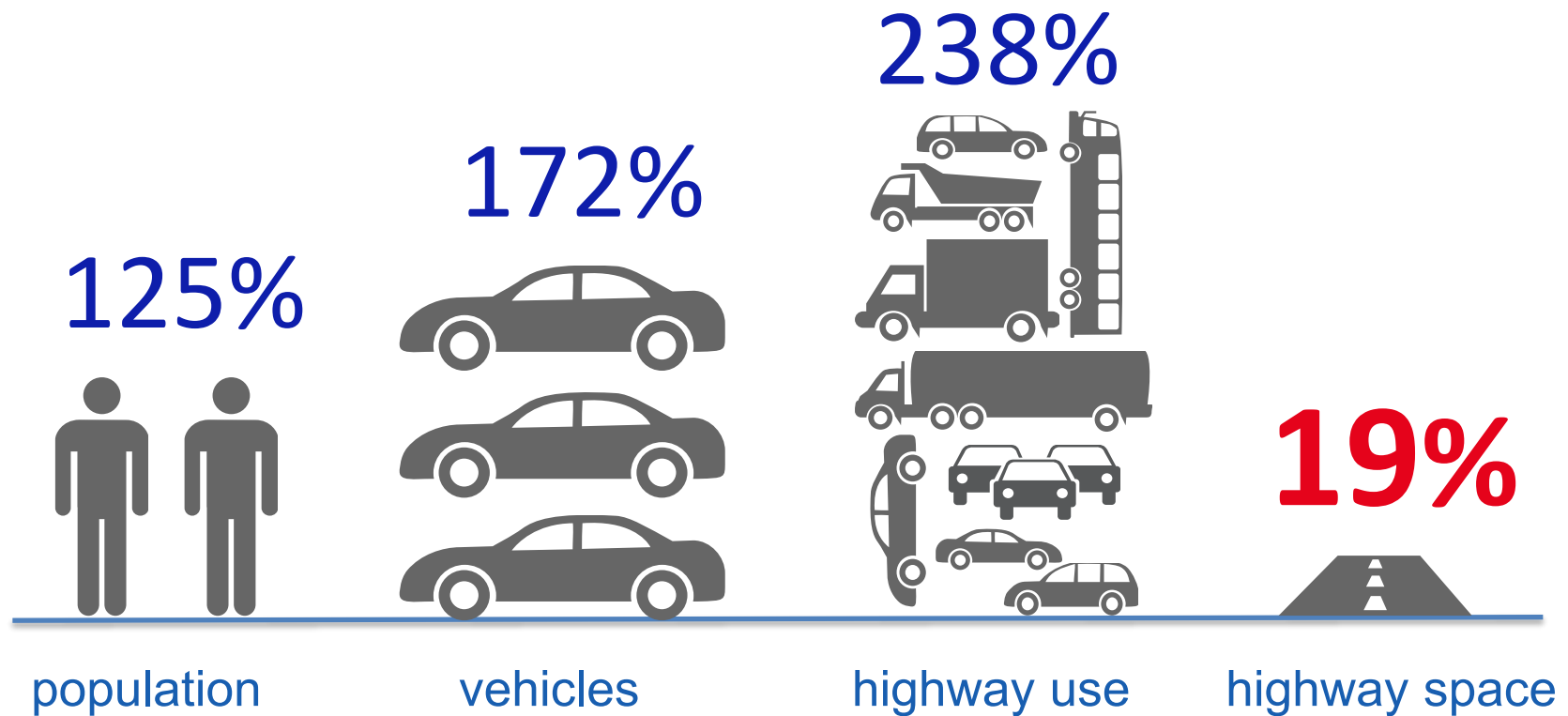


**So...what happened?**



# What happened: 1970 to 2010

It's all about **demand** and **supply**



# How did we get in this hole?

Since 1991, the **cost of everyday goods** has about **doubled**



So has the cost of **building roads**

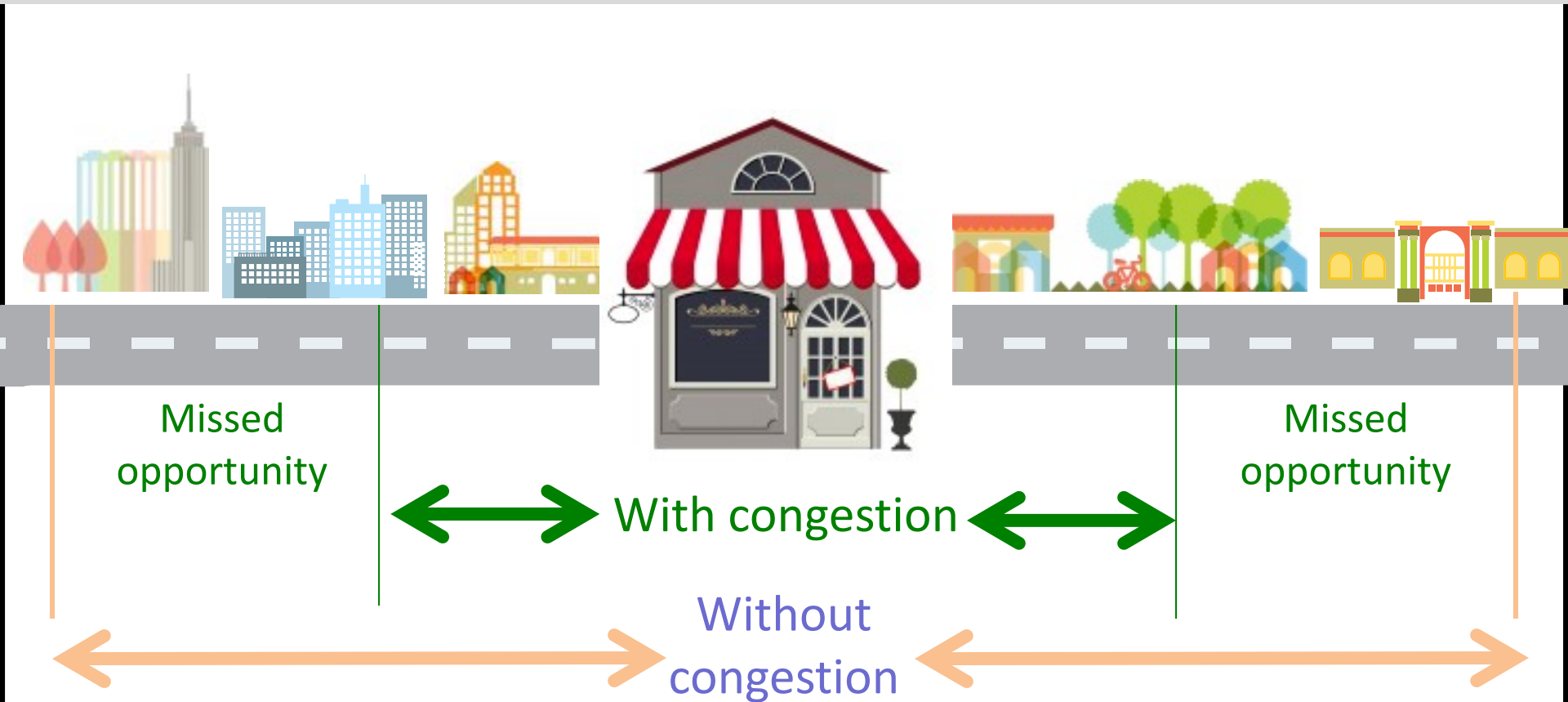


- Growth is good, but its **easier to ‘build demand’ than to ‘build supply’**
- So we need to build vehicle **and** transit **capacity**.
- We also need to **operate** the system.
- And offer worker schedule **options**.
- And **home and work** location options



# Business Cost of Congestion

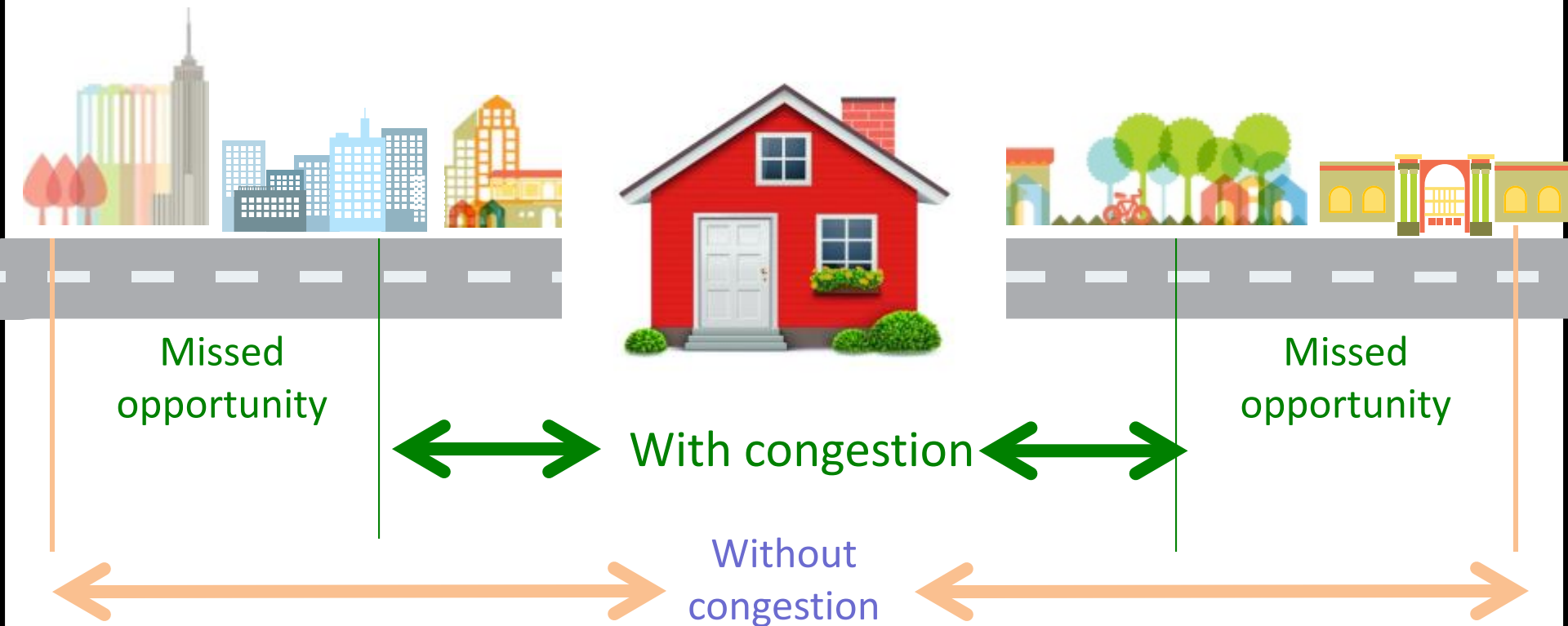
Distance traveled to connect with **customers** in 30 minutes





# Business Cost of Congestion

Commuting distance for **employees**  
in 1 hour



# The Problem: Congestion is Getting Worse in Cities of All Sizes

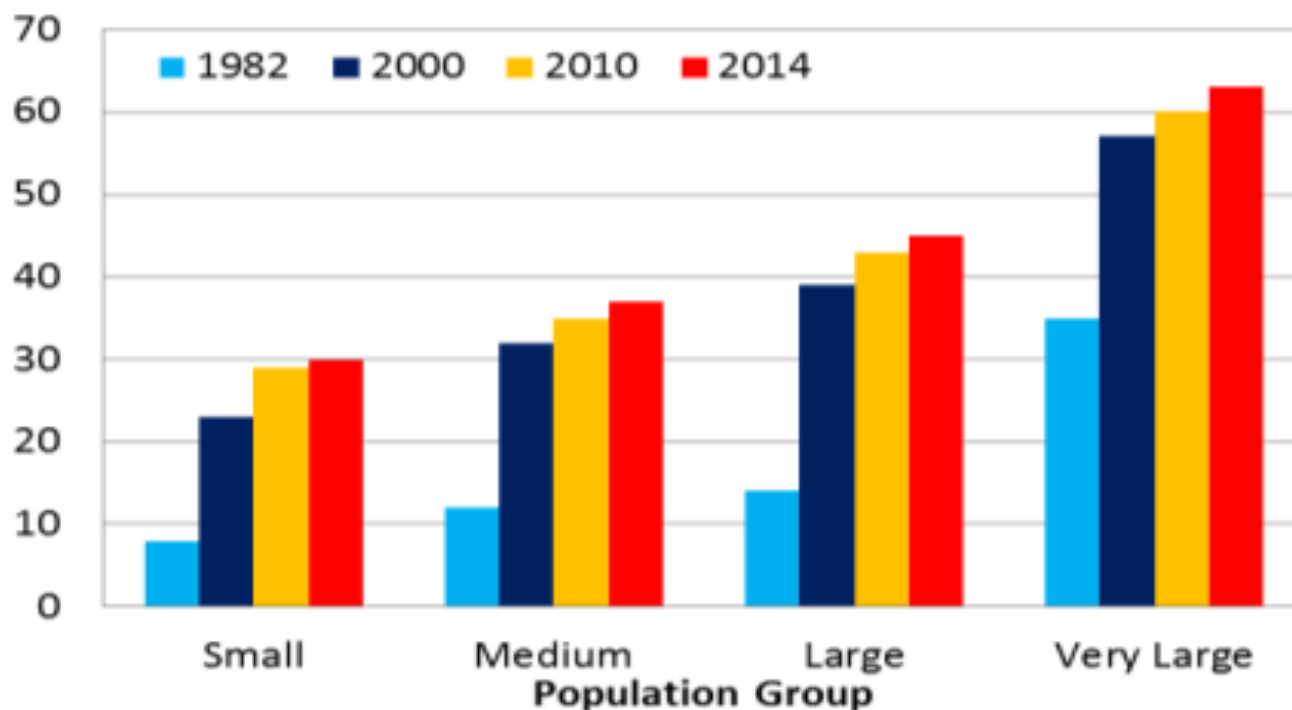
## Delay per Auto Commuter

**Very Large** = 3 M +

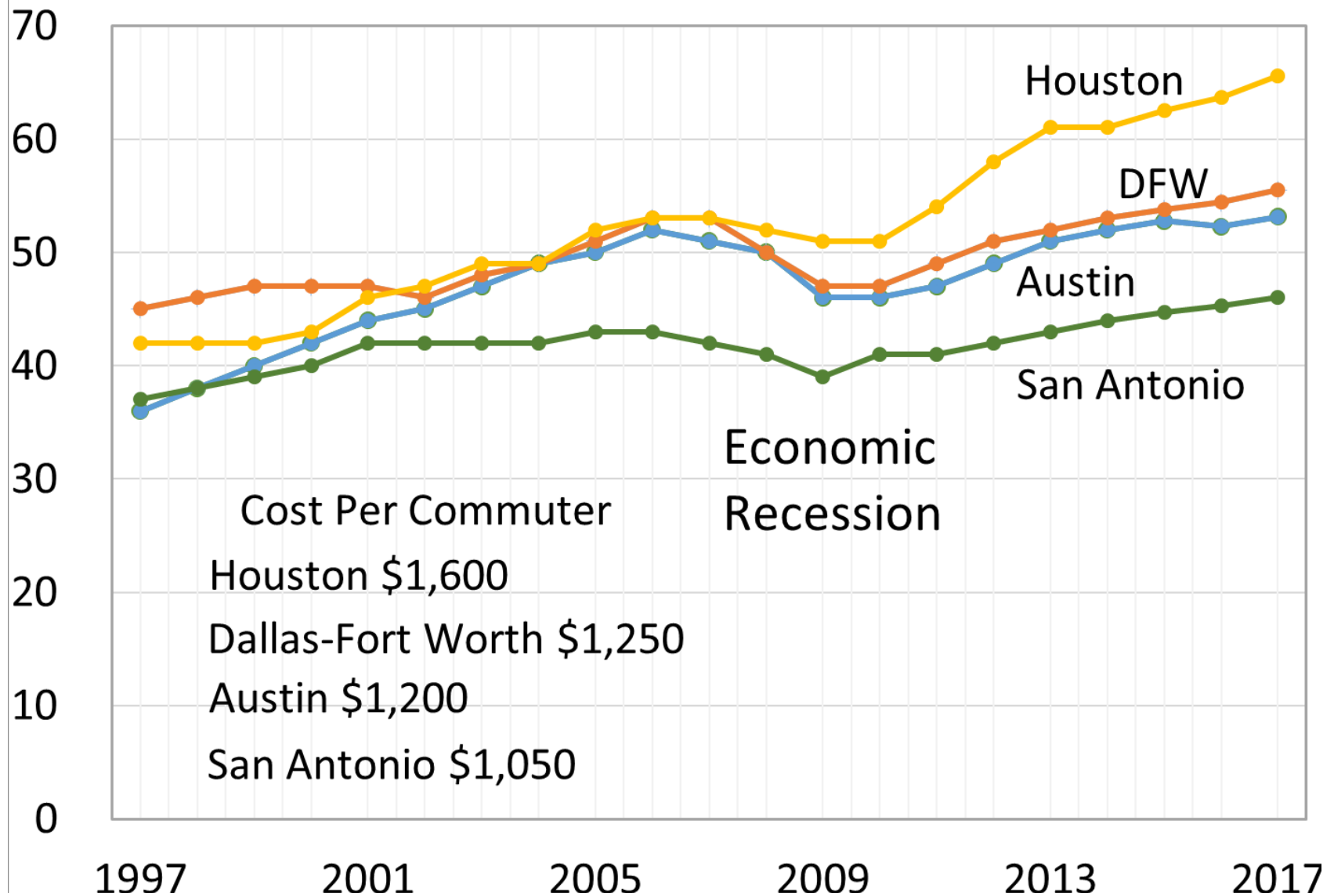
**Large** = 1 M - 3 M

**Medium** = 500 K - 1 M

**Small** = Below 500 K

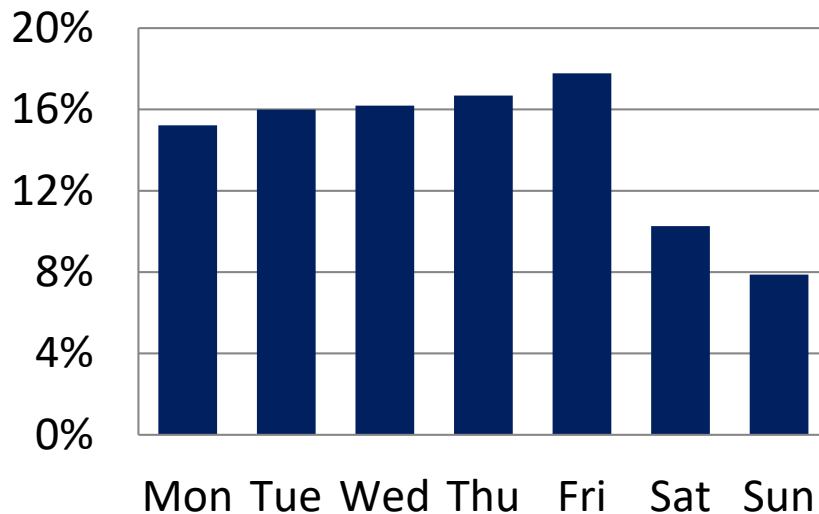


# Extra Travel Time Per Commuter

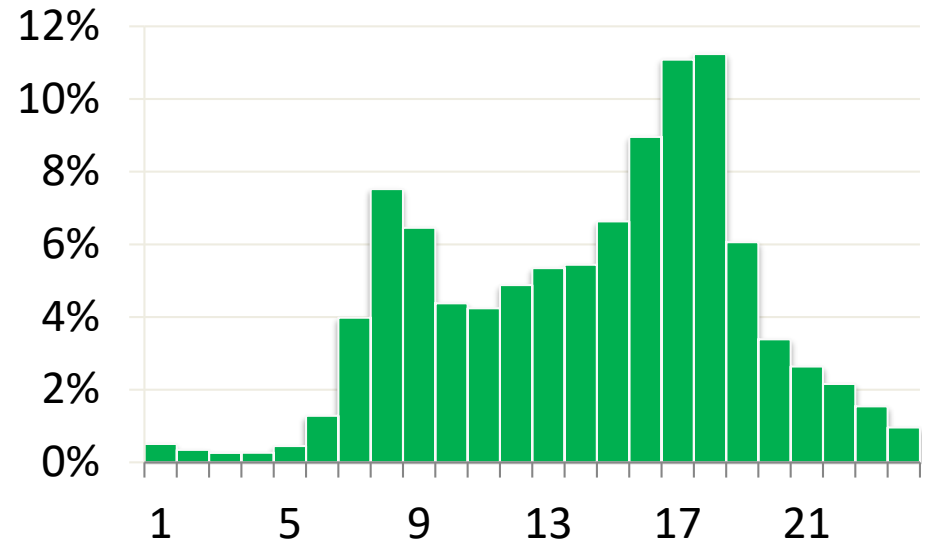


# Congestion Patterns: A Different Look At The Problem

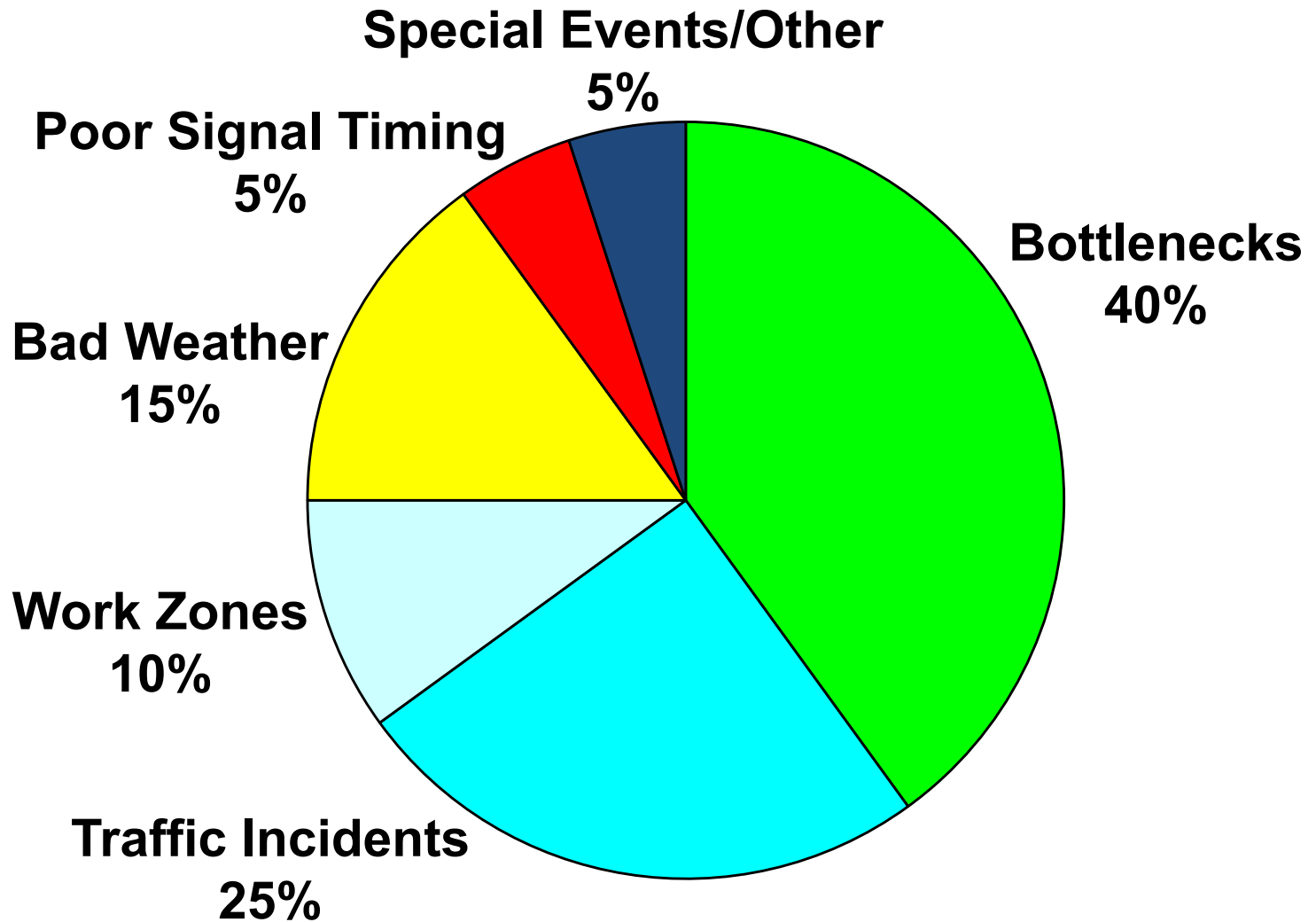
## Delay by Day of Week



## Delay by Weekday Time of Day



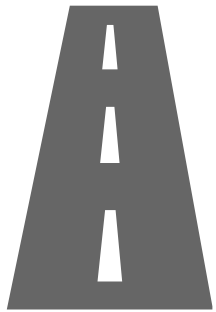
# Congestion Has Many Causes





# So now what?

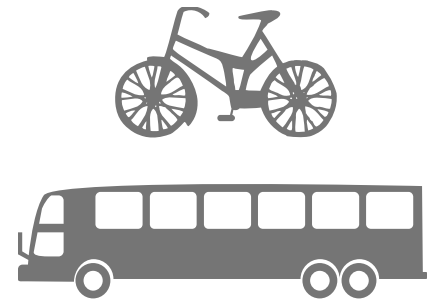
## Get the biggest bang for the buck



**Tackle** most congested roadways & accept some congestion



**Improve** safety



**Support** biking, walking and mass transit options

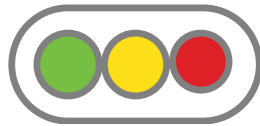
# So now what?

## Use our existing roads smarter



### **Move**

crashes and stalls out of the way



**Time** traffic signals so more see green



**Encourage** ridesharing, incentives & innovation



**Change** rush hour nightmares through flex-time, telecommuting, etc.

For More Info:

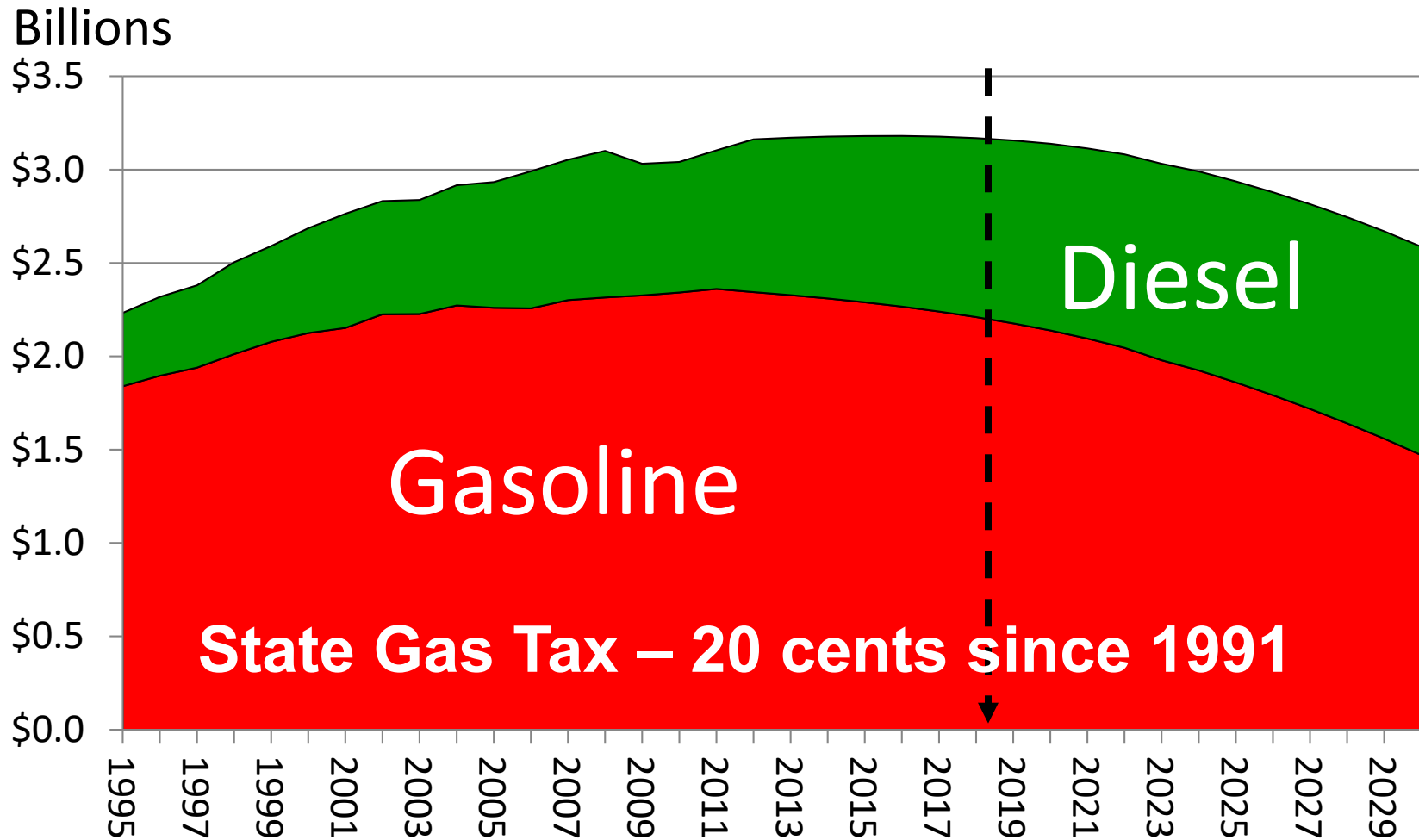
<http://mobility.tamu.edu/mip/strategies.php>

# An Urban Texan View of Rural Traffic Operations

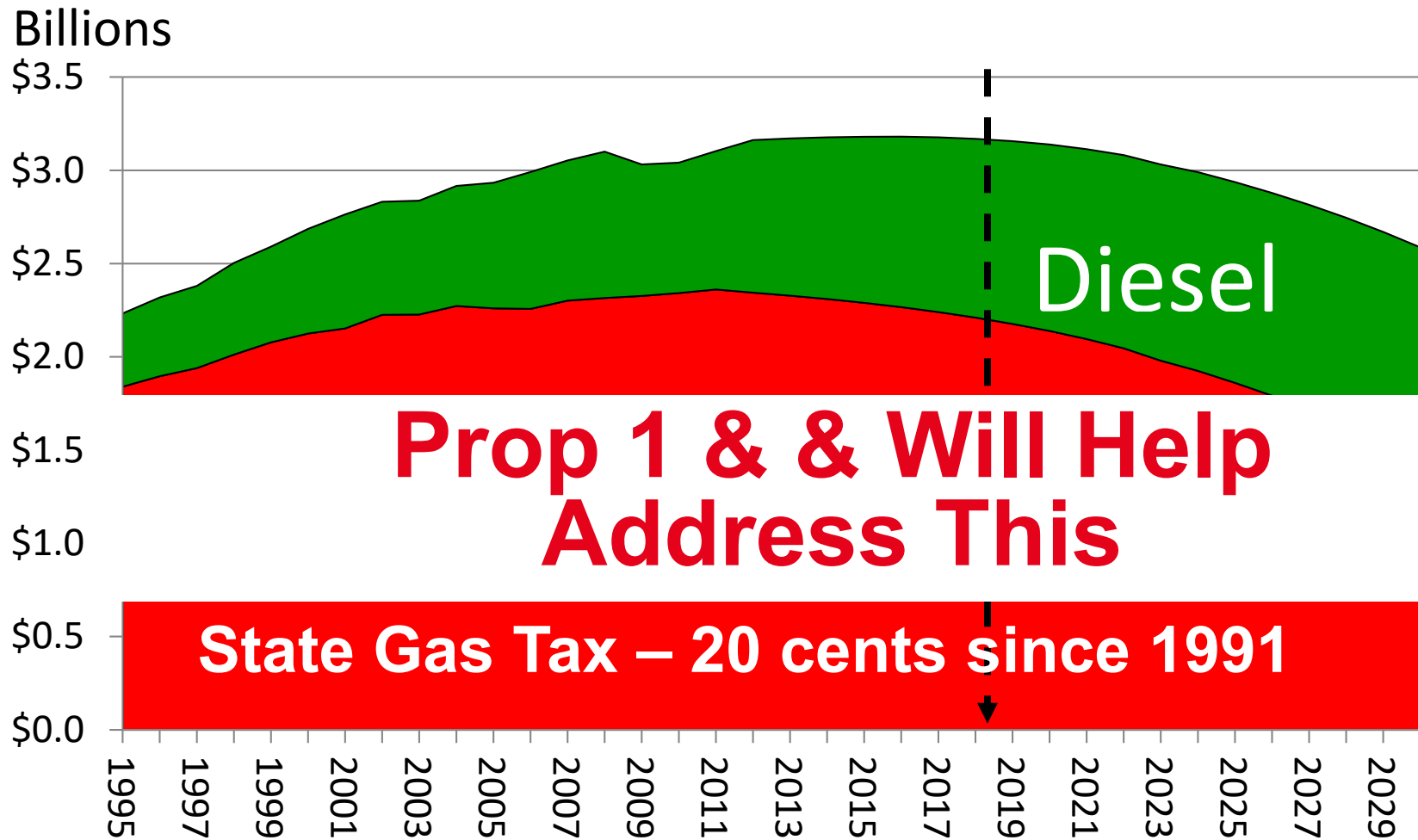


# Texas Transportation Funding Trends:

## Motor fuel tax revenue will decline



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# What does this mean to me?



The average Texan **pays:**

**\$22**/month

in state/federal gas  
taxes and auto fees



**\$128**/month  
Internet, phone,  
cable TV



**\$139**/month  
cell phone

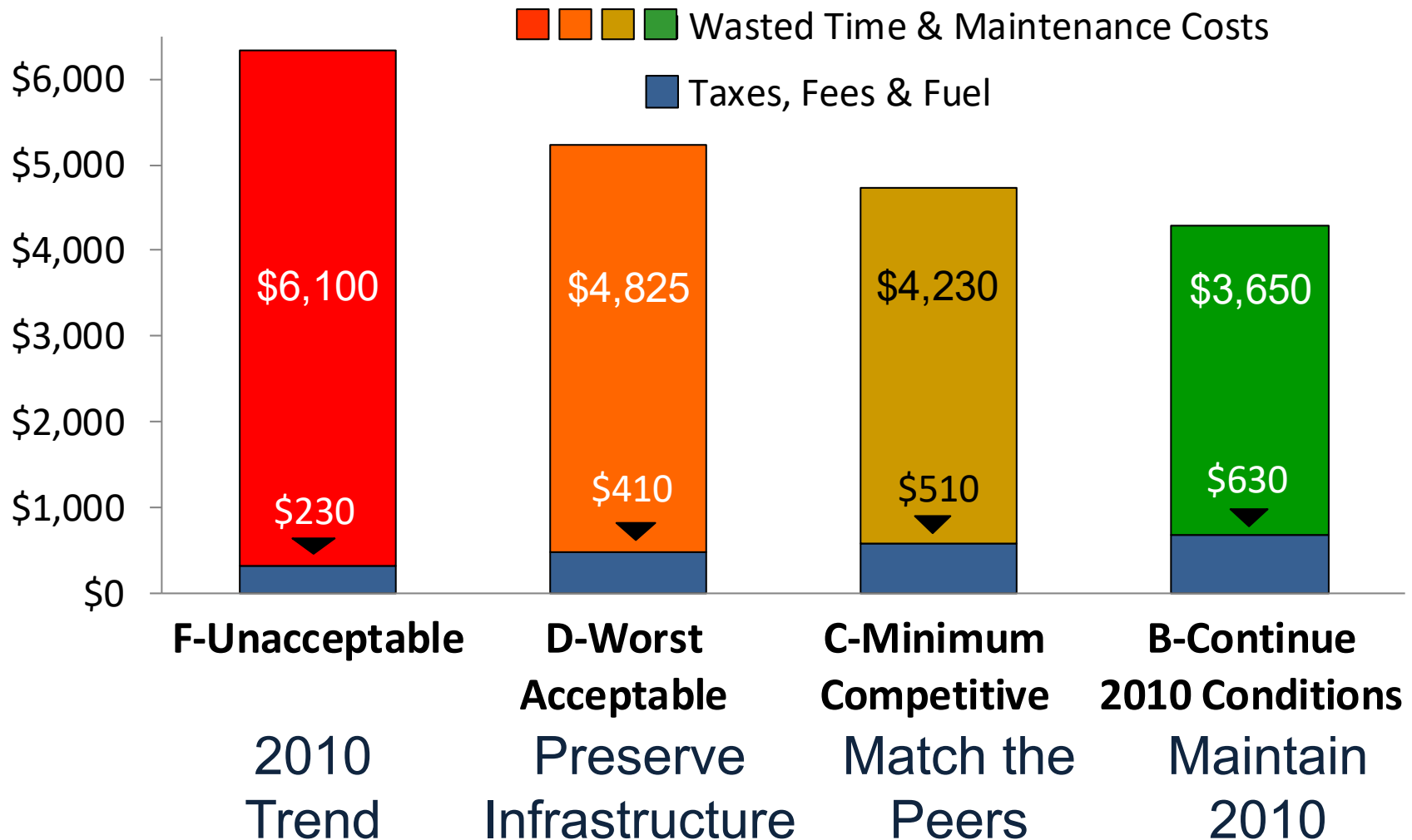


**Is “doing nothing” really an option?**



# A “Business Case” Investment Question

## Annual Cost/Texas Household, 2011 to 2035



# Texas Transportation Poll

Conducted by the Transportation Policy  
Research Center of TTI

Texans...

- *Generally* agree with each other
  - Not as much geographic difference as expected
- 2/3rds (statewide) support increased funding for transportation
- ...but only tepid support for how to raise funds
- Respondents most supportive of dedicating motor vehicle sales tax to transportation needs (5.6/10)
- Next, raising the vehicle registration fee from \$65 to \$75 (only 3.7/10)

# **Texas Transportation Poll**

## ***Realistic Expectations for Funding Plans***

- Predictable long-term solution
- Reduce dependency on foreign oil
- 100% of revenue spent on transportation
- Encourage business and commerce
- Promote clean energy

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[policy.tti.tamu.edu](http://policy.tti.tamu.edu)



# Texas Transportation Poll

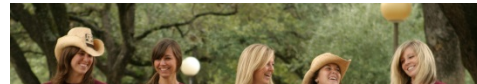
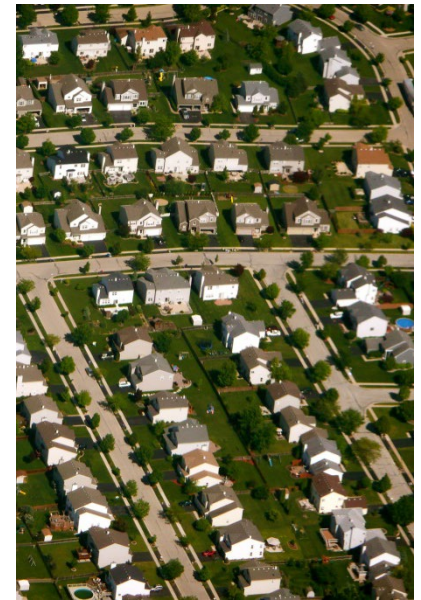
## *Reaction to Solution Ideas*

- Least-supported:
  - More toll roads
  - More \$ in shipping
  - Encourage high-density development around transit stations
- Most popular solutions:
  - Better signal timing
  - Clearing crashes
  - Telecommuting
- In the context of a state growing from 29M to 54M population in 2050? *It's not enough!*
- Technology and new thinking can play a role

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[policy.tti.tamu.edu](http://policy.tti.tamu.edu)

# Why Do You Live Where You Do?

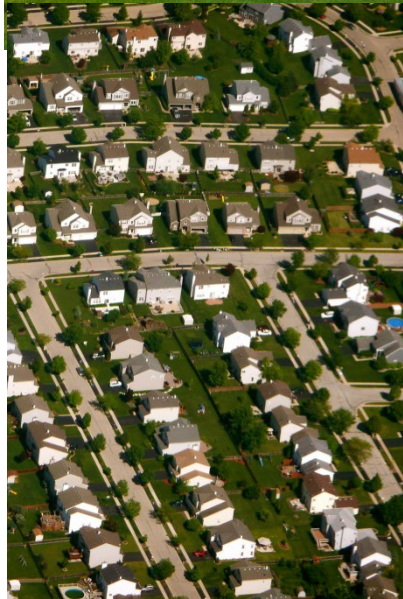
## Phil Lasley, PhD, AICP



TRANSPORTATION  
**Policy Research** CENTER



# Why Do You Live Where You Do?



- Property, Job changes, Neighborhood decide “Region”
- Property, Crime, Affordability decide “Neighborhood”
- Price, Type, Bedrooms decide “House”
- Families rate schools higher
- Traffic more important in larger regions

# Regional Comparison

| OVERALL RANK |                     | HOUSTON             | DALLAS-FORTH WORTH  | AUSTIN              | SAN ANTONIO         | CORPUS CHRISTI      | RURAL-OTHER AREAS   |
|--------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 1            | Property            | Job Relocation      | Job Relocation      | Property            | Property            | Property            | Property            |
| 2            | Job Relocation      | Neighborhood        | Property            | Crime               | Job Relocation      | Neighborhood        | Job Relocation      |
| 3            | Neighborhood        | Property            | Neighborhood        | Neighborhood        | Crime               | Convenience         | Neighborhood        |
| 4            | Crime               | Crime               | Convenience         | Job Relocation      | Convenience         | Crime               | Affordability       |
| 5            | Convenience         | Convenience         | Crime               | Convenience         | Neighborhood        | Job Relocation      | Crime               |
| 6            | Affordability       | Traffic             | Traffic             | Affordability       | Traffic             | Family/Friends      | Convenience         |
| 7            | Traffic             | Affordability       | Affordability       | Traffic             | Affordability       | Traffic             | Family/Friends      |
| 8            | Family/Friends      | Family/Friends      | Schools             | Family/Friends      | Family/Friends      | Affordability       | Traffic             |
| 9            | Schools             | Schools             | Family/Friends      | Schools             | Schools             | Schools             | Schools             |
| 10           | Hipness             | Hipness             | Hipness             | Hipness             | Rent to Own         | Hipness             | Hipness             |
| 11           | Rent to Own         | Rent to Own         | Rent to Own         | Rent to Own         | Hipness             | Relationship Change | Rent to Own         |
| 12           | Relationship Change | Relationship Change | Relationship Change | Relationship Change | Relationship Change | Health/Disaster     | Relationship Change |
| 13           | Health/Disaster     | Health/Disaster     | Health/Disaster     | Health/Disaster     | Leave College       | Rent to Own         | Health/Disaster     |
| 14           | Leave College       | Leave College       | Leave College       | Leave College       | Health/Disaster     | Leave College       | Leave College       |



# Is “doing nothing” really an option?



....this is the  
conversation we  
should be having  
about SOLUTIONS



# Here's how the investment pays off



for

<http://mobility.tamu.edu>

# What Do We Know?

- Transportation funding has not kept pace with demand
- Mobility will get worse
  - How much worse? Depends on how much effort to address the problem
- Failure has consequences
- The Cost of “No” is High!

<http://mobility.tamu.edu>



**SLOW TRAFFIC  
AHEAD**

**ROAD  
CLOSED  
AHEAD**

**SPEED  
REDUCED  
AHEAD**

# If you want a change



RETHINKING OUR PATH *to* MOBILITY

<http://mobility.tamu.edu>



BE BETTER INFORMED | BE MORE INVOLVED | VOICE YOUR OPINION