# Traffic Engineering Core Competencies

Where do we stand?

# Traffic Engineering Core Competencies



It doesn't matter
It's in the past.
- Rafiki

Using your "clicker"



#### Using your "clicker"

- Press the button corresponding to your answer
- Listen to instructions before answering
- Some questions are True False (A or B)
- Some questions are "pick all that apply"
- Some questions are priority order; pick your top answer first, next highest second, etc.



#### Using your "clicker"

- Press the button corresponding to your answer
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  - Look for the indicator light as you press the button!

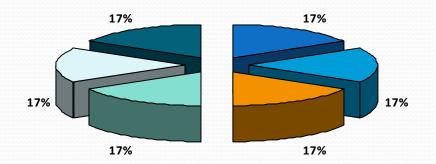


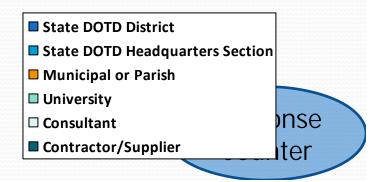


Demo-ing the Graphics...

## Q1. What type of agency do you work for currently?

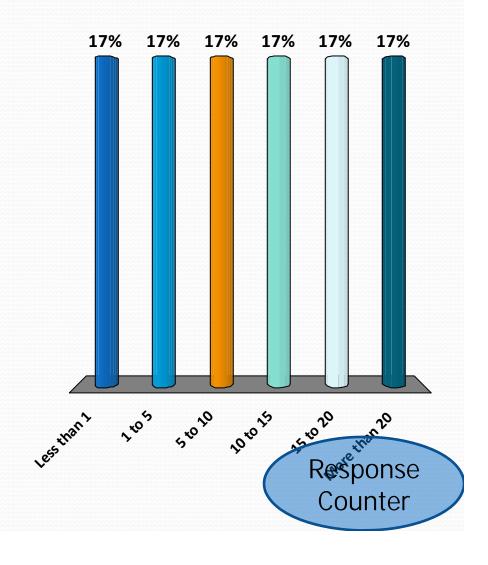
- A. State DOTD District
- B. State DOTD
  Headquarters Section
- C. Municipal or Parish
- D. University
- E. Consultant
- F. Contractor/Supplier





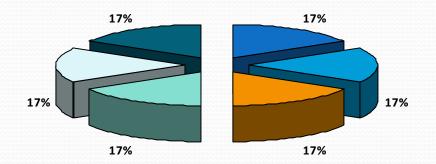
## Q2. How many total years of experience do you have in the field?

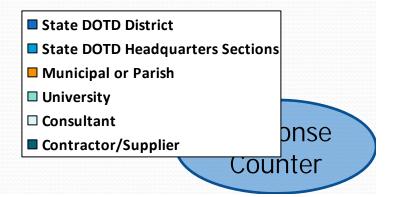
- A. Less than 1
- B. 1 to 5
- C. 5 to 10
- D. 10 to 15
- E. 15 to 20
- F. More than 20



## Q3. With which employer type have you been employed the *longest*?

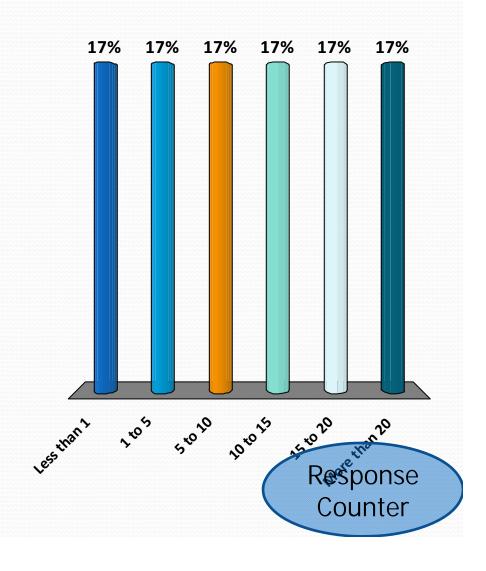
- A. State DOTD District
- B. State DOTDHeadquartersSections
- C. Municipal or Parish
- D. University
- E. Consultant
- F. Contractor/Supplier





## Q3a. How many years of experience do you have with your *longest* employer?

- A. Less than 1
- B. 1 to 5
- C. 5 to 10
- D. 10 to 15
- E. 15 to 20
- F. More than 20



# Traffic Engineering Core Competencies

#### Six topical areas contained on the PTOE exam:

- Traffic Engineering Studies
- Traffic Operations Analysis
- Traffic Safety
- Traffic Control Devices
- Operational Effects of Geometric Design
- Social, Environmental, and Institutional Issues

# Traffic Engineering Core Competencies

#### Six topical areas contained on the PTOE exam:

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### **Core Competencies**

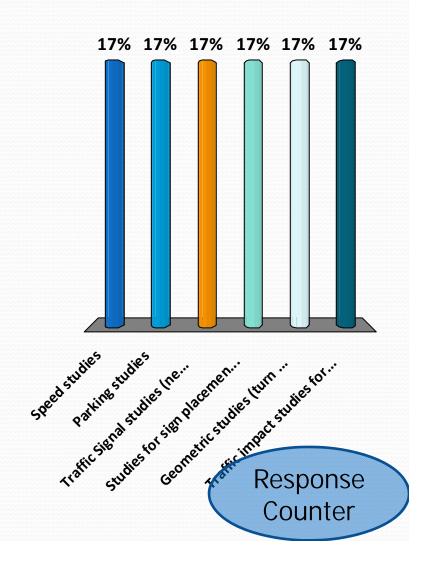
Traffic Engineering Studies

Top 3 Answers in Order, Please!

### Q4. Over the course of my career, I have worked the most on these types of studies.

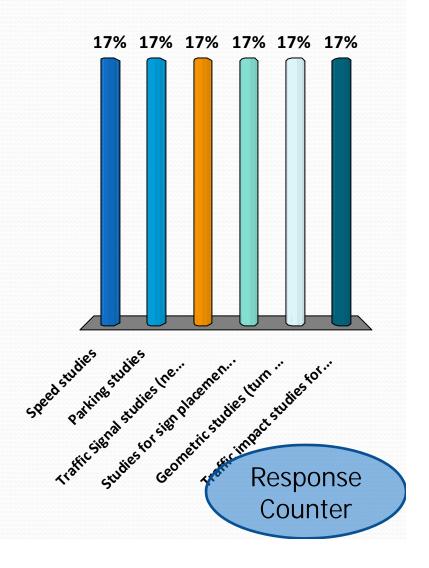
#### (Choose your top 3)

- A. Speed studies
- B. Parking studies
- C. Traffic Signal studies (new and modified)
- D. Studies for sign placement or modification
- E. Geometric studies (turn lanes, intersections, etc.)
- F. Traffic impact studies for developments



## Q5. I could use more training in these areas to help me do my job more effectively (Top 3):

- A. Speed studies
- **B.** Parking studies
- C. Traffic Signal studies (new and modified)
- D. Studies for sign placement or modification
- E. Geometric studies (turn lanes, intersections, etc.)
- F. Traffic impact studies for developments



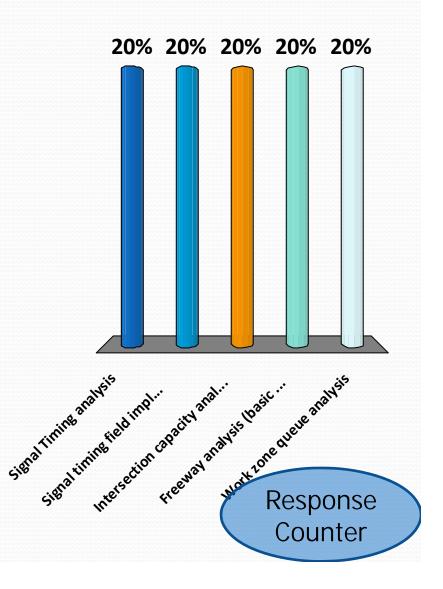
### **Core Competencies**

Traffic Operations Analysis

Choose all that apply!

## Q6. In which of these activities have you participated regularly as part of your job?

- A. Signal Timing analysis
- B. Signal timing field implementation and evaluation/adjustment
- C. Intersection capacity analysis (including roundabouts)
- D. Freeway analysis (basic segment, weaving, ramps, etc.)
- E. Work zone queue analysis



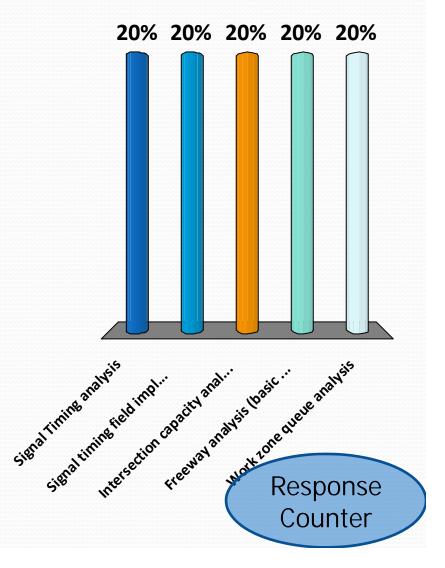
### **Core Competencies**

Traffic Operations Analysis

Pick your Top 3!

## Q7. I could use more training in these areas to help me do my job more effectively (Top 3):

- A. Signal Timing analysis
- B. Signal timing field implementation and evaluation
- C. Intersection capacity analysis (including roundabouts)
- D. Freeway analysis (basic segment, weaving, ramps, etc.)
- E. Work zone queue analysis



### **Core Competencies**

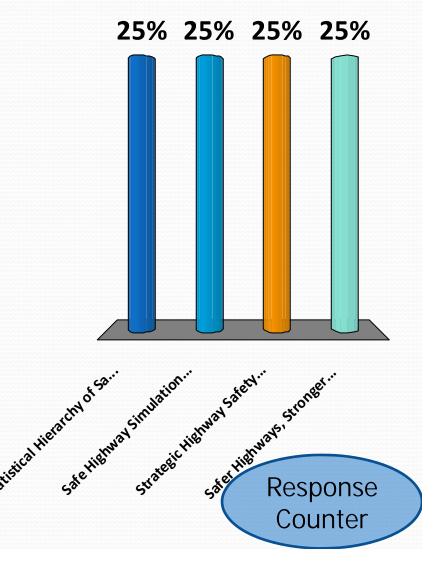
"OH YES, THE PAST CAN HURT.

BUT THE WAY I SEE IT YOU CAN EITHER RUN FROM IT."

Traffic Safety

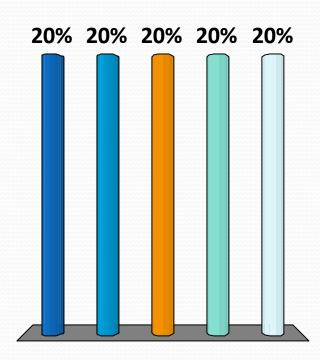
#### Q8. The term SHSP stands for:

- A. Statistical Hierarchy of Safety Practices
- B. Safe Highway Simulation Program
- Strategic Highway
  Safety Plan
  - D. Safer Highways,Stronger Politicians



## Q9. My personal view of Modern Roundabouts is that they are:

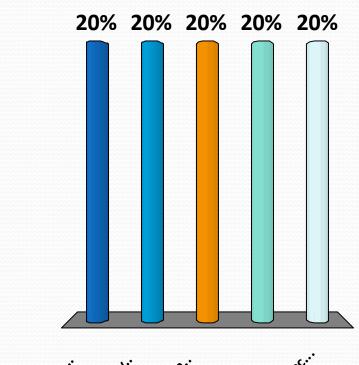
- A. The best thing since sliced bread and should be used everywhere
- B. Effective safety tools and should be considered as a first option wherever possible
- C. Useful countermeasures that need strict policies to make sure they are only used where justified
- D. Expensive, difficult to build, and should be used only as a last resort
- E. They should be sent back to, uh, Europe, or wherever they came from



Jeseth Counternessures ... Response
Counter

## Q10. I feel I need more training in the following areas: (Top 3)

- A. Incorporating Safety into the transportation decision-making process
- B. Application of the Highway Safety Manual
- C. Roadside safety design and evaluation
- D. Low cost safety countermeasures
- E. Pedestrian and bicycle facility design and operation



Incorporating Safety into...

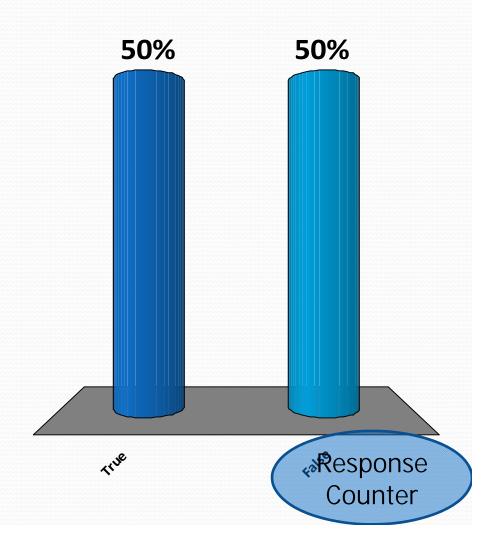
Response

Counter

# O11. I am an active participant in my Regional and/or Statewide Transportation Safety Coalition.

A. True

B. False



### Core Competencies

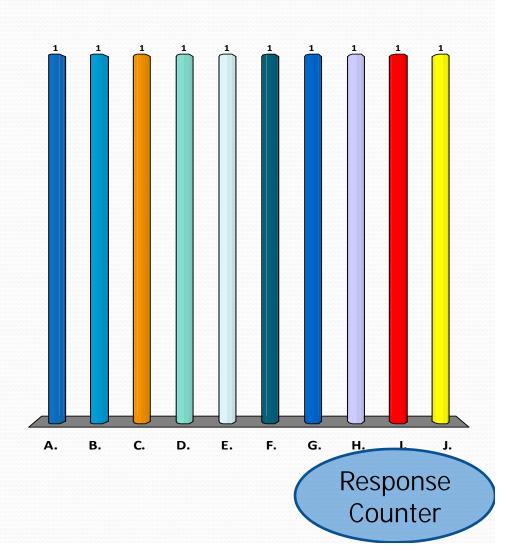
Traffic Control Devices

#### Q12. I have substantial experience in working

#### with/designing the following systems:

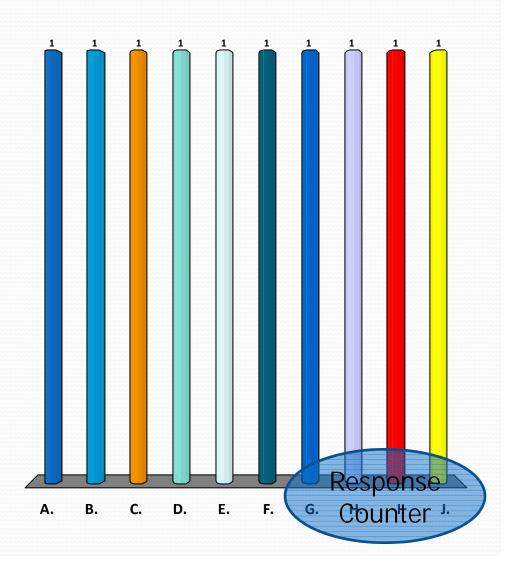
#### (click all that apply)

- A. Signs
- B. Pavement markings
- C. Signals
- D. Low volume roads
- E. Temporary traffic control (work zone)
- F. School area traffic controls
- G. Railroad grade crossings
- H. Pedestrian and bicycle facilities
- I. ITS/Traffic management
- J. Parking facilities



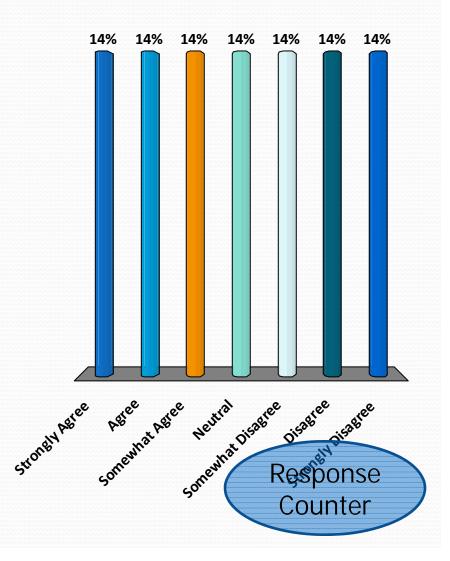
## Q12a. I feel I need more training in the following areas (Top 3):

- A. Signs
- B. Pavement markings
- C. Signals
- D. Low volume roads
- E. Temporary traffic control (work zone)
- F. School area traffic controls
- G. Railroad grade crossings
- H. Pedestrian and bicycle facilities
- I. ITS/Traffic management
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# Q13. Evaluations / adjustments to traffic control systems should be conducted at periodic intervals regardless of known conditions.

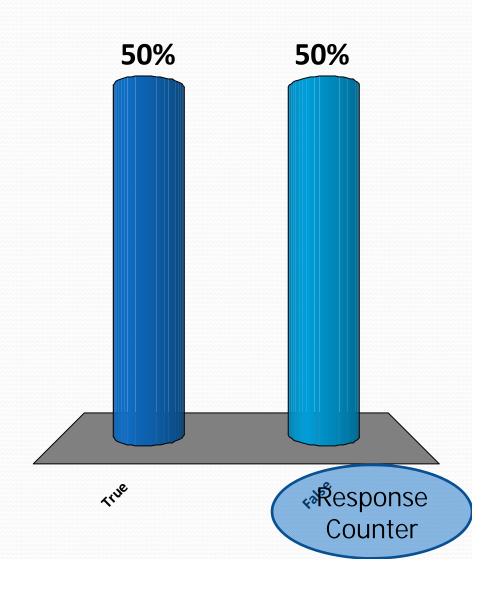
- A. Strongly Agree
- B. Agree
- C. Somewhat Agree
- D. Neutral
- E. Somewhat Disagree
- F. Disagree
- G. Strongly Disagree



## Q14. I have had the opportunity to program a Changeable Message Sign

A. True

B. False

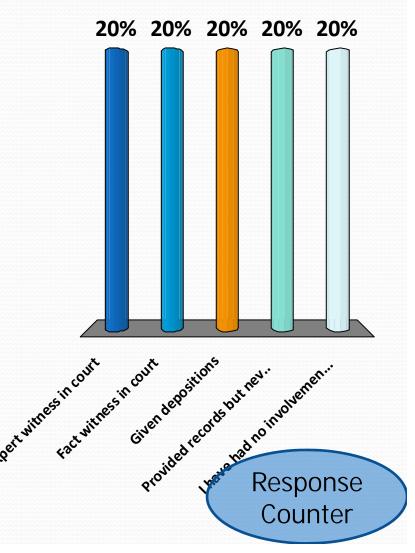


### **Core Competencies**

Additional Items

# O 15. I have had the opportunity to participate in a tort liability case as: (choose all that apply)

- A. Expert witness in court
- B. Fact witness in court
- C. Given depositions
- D. Provided records but never testified
- E. I have had no involvement in liability cases

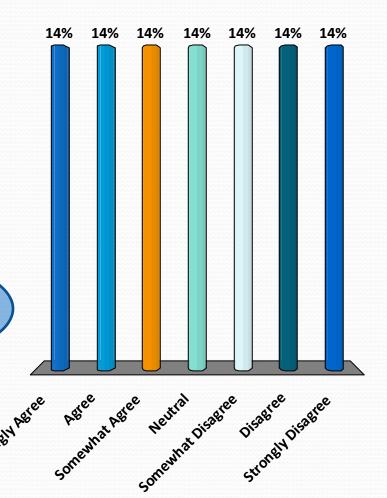


# Q16. I feel comfortable representing my employer and my profession in dealing with the public/public officials/media

Response

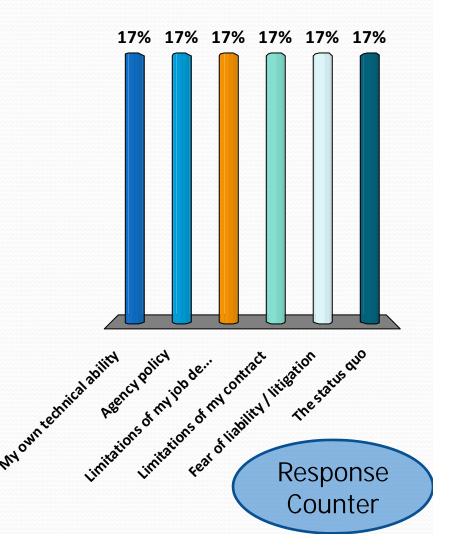
Counter

- A. Strongly Agree
- B. Agree
- C. Somewhat Agree
- D. Neutral
- E. Somewhat Disagree
- F. Disagree
- G. Strongly Disagree



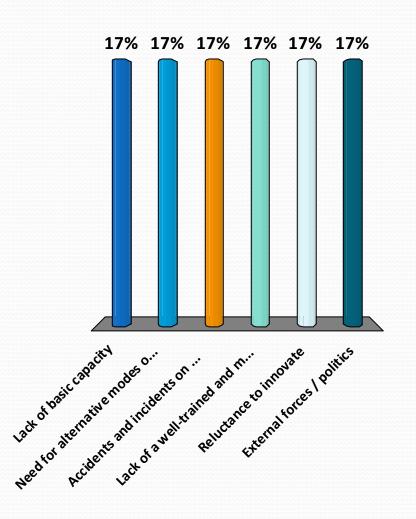
# Q17. I feel that my ability to positively affect the outcome of a traffic issue is *most* frequently *limited* by:

- A. My own technical ability
- B. Agency policy
- C. Limitations of my job description
- D. Limitations of my contract
- E. Fear of liability / litigation
- F. The status quo



# Q18. In my opinion, the *most* significant obstacles to safer and more efficient traffic flow in Louisiana are: (pick your top 3 in order)

- A. Lack of basic capacity
- B. Need for alternative modes of transportation
- C. Accidents and incidents on major roads
- D. Lack of a well-trained and motivated traffic engineering workforce
- E. Reluctance to innovate
- F. External forces / politics





# **Core**Competencies



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