# Index 102-655 Traffic Pacing

# **ORIGINATION**

Date: May 26, 2020

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# **COMMENTARY**

Sheet 1: Deleted 'Traffic Pacing Guide' and 'Notice' narratives; Revised 'Traffic Pacing General Notes' and 'Traffic Control Plans or Technical Specification' Notes; Updated Symbols; Deleted 'One Week Prior to Pacing Operation' Message Detail; Revised and Consolidated Detailwith Sheet 3 Detail.

Sheet 2: Deleted Sheet.

Sheet 3: Deleted Sheet; Revised 'Traffic Pacing Distances' Table and Formula and Moved to Sheet 1; Consolidated Detail with Sheet 1.

# **COMMENTS AND RESPONSES**

**BLACK** = Industry Review Comments **RED** = Standard Plans Response

Name: Dan Preslar / FDOT District 1

Date: September 14, 2020

#### **COMMENTS:**

1. Consider revision to Note 4, add sentence: Include traffic control officers for interchanges/roadway entrances within pacing area.

**RESPONSE:** Agree in part, the note was updated to refence including TCOs at all access points in accordance with the Pacing Plan.

**Change Made** 

2. What is "SPI" referenced on comments on old Sheet 2 of 3? Consider referring to this procedure on sheets.

**RESPONSE:** Standard Plans Instructions (SPI) are used to communicate additional helpful information or guide users to other appropriate criteria. They are also used to provide Examples, which is what was shown on Old Sheet 2. SPI's are not a contract document and therefore not refered on the Index.

No Change

3. Consider keeping PCMS message one week in advance (maybe note "optional as needed for work activities".

RESPONSE: Agreed Change Made

Date: 09/26/2020

Name: Bogdan Piorkowski / Balm Beach County

Date: September 14, 2020

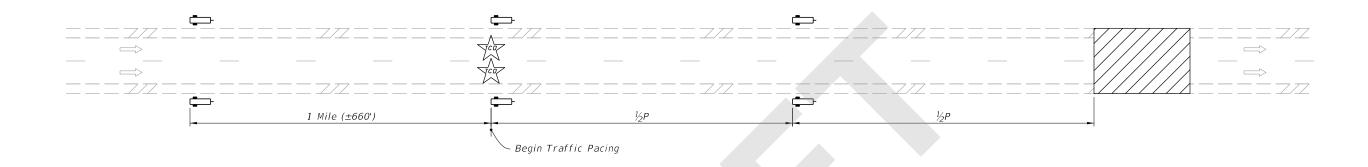
# **COMMENT:**

Sheet 2: Why was this sheet removed?

**RESPONSE:** See Response to Comment #2 above.

**No Change** 

Date: 09/26/2020



## TYPICAL PCMS DISPLAY:

During day of pacing operation:

Message 1: ROAD WORK TONIGHT

Message 2: EXPECT PERIODIC DELAYS

During pacing operation:

Message 1: SLOW TRAFFIC AHEAD Message 2: BE PREPARED TO STOP

One week prior to pacing operation (Optional): Message 1: EXPECT DELAYS ON Message 2: (Month Day Time)

# SYMBOLS:





Lane Identification and Direction of Traffic



Portable Changeable Message Sign (PCMS)

Traffic Control Officer

## NOTES:

- 1. P = Traffic Pacing LengthFor "P" value, see Traffic Pacing Length table or calculate using Formulas.
- 2. See the Plans for traffic pacing restrictions.
- 3. Do not exceed work duration of 30 minutes or traffic pacing length of 10 miles.
- 4. Coordinate with the traffic control officer supervisor to provide the correct number of traffic control officers for each traffic pacing operation. Ensure traffic control officers are located at roadway access points in accordance with the pacing plan.
- 5. Ensure that the necessary equipment is properly positioned for the work before requesting that the traffic control officer supervisor initiate the traffic pacing operation,
- 6. If workers or equipment are within the traveled way during the traffic pacing operation, use a truck- or trailer-mounted attenuator with portable changeable message sign to protect the work.
- 7. For work durations of less than five minutes (e.g, moving large vehicles across the roadway), portable changeable message signs and truck-mounted attenuators are not required. Use traffic pacing length values from the five minute column of the table.
- 8. Where feasible, do not pace traffic past the last available existing egress until the work has been completed.
- 9. When more than one traffic pacing operation is required in a calendar day, allow sufficient time between pacing operations to permit traffic to return to normal speed and flow.
- 10. Maintain communications with all police vehicles throughout the traffic pacing.

| TRAFFIC PACING LENGTH "P"  |                         |     |     |      |    |    |
|--|-------------------------|-----|-----|------|----|----|
| Pacing Speed = 20 mph  |                         |     |     |      |    |    |
| Work Zone<br>Speed (mph)   | Work Duration (minutes) |     |     |      |    |    |
|  | 5                       | 10  | 15  | 20   | 25 | 30 |
| 70   | 2.3                     | 4.7 | 7.0 | 9.3  | -  | -  |
| 65   | 2.4                     | 4.8 | 7.2 | 9.6  | -  | -  |
| 60   | 2.5                     | 5.0 | 7.5 | 10.0 | -  | -  |
| 55   | 2.6                     | 5.2 | 7.9 | -    | -  | -  |
| 50   | 2.8                     | 5.6 | 8.3 | -    | -  | -  |
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(1) All lengths in the above table are in miles.(2) For work durations with no values shown above, calculate length using a reduced pacing speed, but not less than

## FORMULAS:

 $S_{w}$ = Work Zone Speed (mph)

 $S_p = Pacing Speed (mph)$ 

 $t_w = Work Duration (minutes)$ 

P = Traffic Pacing Length (miles)

$$P = \frac{t_W}{60} S_p \left( \frac{S_p}{S_W - S_p} + 1 \right)$$

$$P = P_C + P_W$$

 $P_{c} = distance paced vehicles must travel$ before the vehicles at regulatory speed have cleared the work zone

$$P_{C} = \left(\frac{\frac{t_{W}}{60} \times S_{p}^{2}}{S_{W} - S_{p}}\right)$$

 $P_{w}$  = distance paced vehicles

$$P_W = \left(\frac{t_W}{60} \times S_p\right)$$