Driving Indiana’s Economic Growth

INDOT’s Revised Interstate Lane Closure Policy

96th Annual Road School

INDOT’s Revised Interstate Lane Closure Policy

Original Policies Effective since January 2004

January 21, 2004

January 27, 2004

2010 Revised Policy

Combines the previously separate policies into one overall policy.

Effective for All active projects / contracts which have a Ready for Contract (RFC) date greater than 60 days after the approval date
Administration

Previous Policies:
- Administered by the Work Zone Safety Section as a part of Traffic Engineering in the Highway Operations Division

Revised Policy:
- Administered by the Work Zone Safety Section as a part of the Public Safety Operations Division in Traffic Management

Signatures

Previous Policies:
- Division Director of Highway Operations for Maintenance Waivers
- Deputy Commissioner of Highway Management for Construction Waivers

Revised Policy:
- State Maintenance Director for Maintenance Waivers
- State Construction Director for Construction Waivers

Length of Closure

Design Manual and Previous Policies:
- Currently have no limits on the length of a lane closure that will be permitted on the Interstate
- Rule of thumb has been to limit closure length to 4 miles

Revised Policy:
- Limits the total closure length, including tapers to 5 miles.
Non-Compliant Work

Previous Policies:
- Broken into two Policies
  - Construction
  - Maintenance
- Potential for different pre-approved schedules
- Diverging intent if one policy changes but the other does not

Revised Policy:
- Created one policy to include Construction and Maintenance.
  - Use the same tables and maps
  - Consistent intent for construction and maintenance projects

Emergency Repairs

Exempt from the policy
- Emergency determined by the District Deputy Commissioner
- Report required within 2 working days after the emergency is over that:
  1. Explains the emergency situation,
  2. Gives the details of the closure, including:
     a. Which lane(s) was(were) closed,
     b. The hours of the day for the closure, and
     c. The length of any queues that developed.

Appendices

- Meant to be updated periodically without requiring an entirely new policy
  - Appendix A details pre-approved lane closures
  - Appendix B covers how to obtain a waiver
Appendix A

Time Descriptions
Detail the start and stop times and days of the preapproved schedule

- Original Policies: *(In the body of the policy)*
- Revised Policy: *(In Appendix A to allow for easier revision)*

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Time Descriptions
Original Policies:

Revised Policy:
- 1. Anytime: Single lane closures anytime of day or night in each direction.

Prevents the closure of an entire interstate for an indeterminate time!

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Time Descriptions
Original Policies:
- b. Weekend or Night-time Only: Unlimited lane closures between Friday 9:00 p.m. through Monday 6:00 a.m. and weekdays 9:00 p.m. to 6:00 a.m. Along routes with significant commuter traffic.

Revised Policy:
- 2. Weekend or Night-time Only: Single lane closure per direction between Friday 9:00 p.m. through Monday 6:00 a.m. and weekdays 9:00 p.m. to 6:00 a.m. Typically, along routes with significant commuter traffic.
**Time Descriptions**

**Original Policies:**

c. Weekday or Night-time Only: Unlimited lane closures except from Friday 6:00 a.m. to Sunday 9:00 p.m. Pertains to routes which experience significant increases in traffic during the weekends.

**Revised Policy:**

- Weekday or Night-time Only: Single lane closure per direction from Sunday 9:00 p.m. to Friday 6:00 a.m. Nightly lane closures allowed on Friday and Saturday from 10:00 p.m. to 6:00 a.m. Pertains to routes which experience significant increases in traffic during the weekends.

**Time Descriptions**

**Original Policies:**

d. Night-time: Any day 9:00 p.m. to 6:00 a.m. Generally along routes with heavy traffic where queues > 1.0 mile can be expected during the daylight hours.

**Revised Policy:**

4. Night-time: Single lane closure per direction any day of the week from 9:00 p.m. to 6:00 a.m. Generally along routes with heavy traffic where queues > 1.0 mile can be expected during the daylight hours.

**Time Descriptions**

**Original Policies:**

e. Executive Approval: Only along the heaviest (Average Annual Daily Traffic (AADT) > 50,000 vehicles/day) traveled rural four lane routes. Except for conditions designated as an "Emergency", an approved request by the Chief Engineer (Design Division developed projects) or Deputy Chief of Highway Operations (District developed projects) is required before any lane closure takes place.

**Revised Policy:**

5. Executive Approval: Along the most heavily traveled routes such as high volume segments in heavily populated urban areas and rural four lane segments with an Average Annual Daily Traffic (AADT) > 50,000 vehicles/day. Except for conditions designated as an "Emergency", a waiver approved by the appropriate authority (DC or DD) is required before any lane closure takes place in these segments.
Time Descriptions

Original Policies:
f. Minimum 2 Lanes / Direction: Generally along six lane urban interstate with AADT < 100,000 vehicles / day. A minimum of two lanes per direction shall be open at all times.

Revised Policy:
Not used

Time Descriptions

Original Policies:
g. Minimum 3 lanes / Direction: Along urban routes with eight lanes or greater. A minimum of three lanes per direction shall be open at all times.

Revised Policy:
• Minimum 3 lanes / Direction: Along urban routes with eight lanes or greater. A minimum of three lanes per direction shall be open at all times.

No Change

Tables of Preapproved Closure Schedules
Created to ensure precision and because the colorblind can use them.
Maps of Preapproved Closure Schedules

Original Policies:
- Statewide Map

Revised Policy:
- Statewide Map

Maps of Preapproved Closure Schedules

Original Policies:
- Inset Map

Revised Policy:
- Inset Map

Appendix B
- Discusses Queue analysis
- Establishes guidelines for acceptable and unacceptable queue
- Shows a sample analysis
- Includes generic sample waiver requests
Appendix B

Queue Analysis:
- Designer performs a queue analysis using the software of their choice
- Use current count data or most recently collected data with an adjustment if it is over two years old
- Use an appropriate Consumer Price Index when working with QueWZ98
- Discretion is required when using any modeling software

Define Queue: In general a condition that causes driver frustration due to stop and go traffic should be considered a queue and avoided where possible. A vehicle will be considered part of a queue if its average operating speed is reduced 10 mph or more below the posted construction speed limit.

Guidelines for acceptable and unacceptable queue
A. No queues of any length should be permitted to exceed 6 continuous hours duration or 12 hours in any calendar day.
B. Queues greater than 0.5 miles and less than 1.0 mile long should not be permitted to exceed 4 continuous hours.
C. Queues greater than 1.0 mile and less than 1.5 miles should not be permitted to exceed two continuous hours.
D. Queues that will exceed 1.0 mile in length and last for more than two continuous hours or queues longer than 1.5 miles for any period of time should not be permitted.
Appendix B
Guidelines for acceptable and unacceptable queue
A. No queues of any length should be permitted to exceed 6 continuous hours duration or 12 hours in any calendar day.
B. Queues greater than 0.5 miles and less than 1.0 mile long should not be permitted to exceed 4 continuous hours.
C. Queues greater than 1.0 mile and less than 1.5 miles should not be permitted to exceed two continuous hours.
D. Queues that will exceed 1.0 mile in length and last for more than two continuous hours or queues longer than 1.5 miles for any period of time should not be permitted.

Appendix B
Acceptable Queue Guidelines for the Previous Policies
The following thresholds shall be used for the evaluation of project queue lengths as determined by the computer model:
1. For queues less than 1.0 mile, the work zone impacts are acceptable.
2. For queues greater than 1.0 mile and less than 1.5 miles, the work zone impacts are acceptable if the queue exceeds 1.0 miles for two hours or less. Where queues are expected, additional advanced work zone warning signing should be specified.
3. For queues longer than 1.0 mile for more than two hours or longer than 1.5 miles for any period of time, the work zone impacts are unacceptable. Alternate strategies shall be considered per the provisions of this policy.

Appendix B
Additional Guidelines for Queue
For projects with daily, non-continuous lane closures the following additional guidance should also be followed:
If queue can be eliminated by adjusting the hours worked while still completing the project in a reasonable time frame then the adjustment should be made
A. Whenever possible the closure should not begin during an hour which will generate a queue.
B. If the last hour planned for work is the first in which queue will be generated then the schedule should be adjusted away from closing during that hour.