



LANE CLOSURE GUIDELINES

OBJECTIVE:

- Provide guidance for the development and approval of various types of lane closure requests.
- Detail the process for requesting approvals and necessary data to support a request.
- Explains the types of requests by each Department and external requestors, who the primary points of contact are in the process and details the Holiday and special event restrictions.

PURPOSE:

The Lane Closure Guidelines supplements the Florida's Turnpike Enterprise (FTE) Lane Closure Policy and provides additional information about the procedures necessary for lane closures to be processed on the Turnpike system.

AUTHORITY:

Sections 338.2216, Florida Statutes

DEFINITIONS:

<i>Department:</i>	Florida Department of Transportation (FDOT), FTE
<i>Emergency:</i>	Any occurrence, or threat thereof, whether accidental, natural, technological, or manmade, in war or in peace, which results or may result in substantial injury or harm to the population or substantial damage to or loss of property as defined under F.S. 252.34(3)
<i>Engineer:</i>	The Department's Engineer(s) authorized to monitor and control activities on the State Turnpike System [F.S. 334.14]
<i>EOR:</i>	Engineer of Record
<i>FDM:</i>	Florida Department of Transportation Design Manual (latest edition)
<i>Lane Closure:</i>	Temporary closure of one (1) or more through traffic lane(s), auxiliary lane(s), toll lane(s), ramp lane(s), mobile operations, or traffic pacing. Mobile operations are considered lane closures.
<i>PCMS:</i>	Portable Changeable Message Sign
<i>ProjectSolve SP:</i>	Lane closure management tool used by FTE
<i>TTCP</i>	Temporary Traffic Control Plan
<i>TMC:</i>	Traffic Management Centers for Florida's Turnpike, located at Pompano Beach and Turkey Lake (Ocoee)
<i>Traffic Pacing:</i>	The slowing of traffic to provide a maximum of 30 minutes of clear travel way for the contractor to work over existing travel lanes
<i>Turnpike Mainline:</i>	Turnpike Extension, Southern Turnpike Mainline, Central Turnpike Mainline, Northern Turnpike Mainline, and the Golden Glades Spur
<i>Turnpike System:</i>	Includes the Turnpike Mainline (S.R. 91 & S.R. 821) and other Expressways/Parkways/Beltways that are owned and operated by the Turnpike. Includes S.R. 528 Beachline Expressway, S.R. 429 Western Beltway, S.R. 417 Seminole Expressway and Southern Connector, S.R. 869 Sawgrass Expressway, S.R. 589 Veterans Expressway, S.R. 589 Suncoast Parkway, S.R. 570 Polk Parkway, S.R. 23 First Coast Expressway and S.R. 407 Challenger Memorial Parkway.

GENERAL GUIDELINES

No lane closure is performed on the Turnpike System without prior approval as dictated in the Lane Closure Policy, these guidelines, and the FDM, unless under emergency circumstances. The TTCP is submitted with the lane closure request and is subject to review and revisions as directed by the Department. Review of lane closure timeframes is in accordance with the Lane Closure Policy and is also evaluated against current and projected traffic volumes at the time of the proposed closure.

Generally, the Department considers multiple factors in evaluating lane closure requests which typically includes a per lane roadway capacity. Capacity is lowered due to higher truck volumes and empirical observations to reduce potential delays to customers and increase safety.

A Lane Closure Memo is required for all projects meeting the 10-hour requirements of the FDM. The lane closure analysis (LCA) is completed using the FDM 241 Lane Closure Worksheets and the below guidelines.

1. Traffic Volumes:
 - a. Collect traffic volume data between each interchange and in each direction within the project limits.
 - b. Collect traffic volume data directly outside of the project limits that the work zone/MOT will impact.
 - c. Choose the most restrictive daily volumes (avoid any special events, holidays, etc.) for a one-week period and analyze volumes to determine a general closure period.
 - i. Weekends are Friday morning to Sunday evening.
 - ii. Weekdays are Sunday evening to Friday morning.
 - d. Use traffic volume data that is no more than 365 days old.
 - i. Add a Peak Seasonal Conversion Factor to the volume data.
 - ii. Add yearly growth rates to the traffic volume data to the end of construction year.
 - e. A User Defined Capacity of 1,400 VPHPL is inputted on the FDM 241 Lane Closure Worksheet.
 - f. If traffic volumes differ significantly (by one or more hours) by direction, show lane closure hours by direction (northbound, southbound, eastbound, westbound). A lane closure period is to be consistent for each direction.
2. Updating a LCA:
 - a. The LCA is based on the End Construction year. If the End Construction year is moved to a future year, the LCA is to be updated.
 - b. For projects that exceed the LCA projected date (letting date was moved), the LCA is updated with the most recent projected volume for the new letting year.
 - c. All updated LCA is reviewed in the ERC.
3. The EOR collaborates with local agencies to gain concurrence for all proposed lane closures and detours outside of the Turnpike right-of-way.
4. The Lane Closure Memo includes (but is not limited to) the following:
 - a. A summary of the closure period based on the FDM 241 Lane Closure Worksheets.
 - b. Appendix includes (but is not limited to):
 - i. The Traffic Report from the Planning Department which provides volume data, growth rates, etc.
 - ii. FDM 241 Lane Closure Worksheets

- iii. Peak Seasonal Conversion Factor data from Florida Traffic Online
5. Signature Requirements: EOR
6. The Lane Closure Memo is to be submitted in the ERC with the 45% TTCP. It will be processed as a separate ERC submittal that is independent of the 45% TTCP submittal.

LESS THAN 10-HOUR LANE CLOSURE WORK PERIODS

The Department makes every attempt to meet the FDM 240 requirements of providing at least one 10-hour work period. However, if there are significant impacts to the customer, a Lane Closure Variation may be needed.

If the FDM 241 Lane Closure Worksheet shows less than a 10-hour work period (while using a capacity of 1,400 VPHPL), the following applies.

1. The critical element when attempting to meet the 10-hour closure time is the AM limits of the LCA. This time determines when the MOT is picked up from the roadway.
2. Example: Based on the Lane Closure Worksheets from the FDM 241, if the calculations show an allowable closure period of 9PM to 6AM, then to meet the 10-hour requirements of the FDM, the proposed lane closure time will start at 8PM.
3. Critical lane closures should occur when congestion is waning rather than intensifying.
4. The Highway Capacity Manual (HCM) methodologies are utilized to provide support for Level of Service (LOS) and volume-to-capacity ratios for hours not met.
 - a. If a LOS E/F is achieved for unmet hours, a meeting with Traffic Operations, Roadway, and Construction is required to determine if a Lane Closure Variation is needed. The FDM 241 Lane Closure Worksheets and HCM analysis are to be attached to the meeting invite.
 - b. If a LOS A-D is achieved for unmet hours, then a Lane Closure Memo is needed.
 - i. A Lane Closure Memo showing the updated hours is to be submitted in the ERC with the 45% TTCP. It will be processed as a separate ERC submittal that is independent of the 45% TTCP submittal.
 - ii. The HCM analysis is to also be included in the Appendix.

Lane Closure Variations for closures less than 10 hours for one or more lanes closed includes (but is not limited to) the following:

1. A table of the closure period(s) based on the FDM 241 Lane Closure Worksheets utilizing a User Defined Capacity of 1,400 VPHPL.
2. A table of the closure period(s) based on the FDM 241 Lane Closure Worksheets utilizing the Lane Closure Capacity Tables (1,800 VPHPL).
3. A table showing the proposed lane closure period(s) based on this document and in coordination with Traffic Operations.
4. LOS (using HCM analysis) based on project specifics (i.e. minimum lateral clearance, speed limit through the work zone, truck percentage, area type, etc.).
5. Additional guidance for a Lane Closure Variation from Central Office can be found on the [Florida's Turnpike Design website](#).
6. The Appendix should include the following which is in addition to the requirements from Central Office.
 - a. FDM 241 Lane Closure Worksheets

- b. HCM analysis
 - c. Pictures of congestion events outside of the proposed closure hours
 - d. Congestion reports
7. The Lane Closure Variation is to be submitted in the ERC prior to the 60% submittal. It will be processed as a separate ERC submittal that is independent of the 60% submittal.
8. Signature Requirements:
- a. EOR
 - b. Chief Engineer
 - c. District Design Engineer
 - d. District Traffic Operations Engineer

WEEKEND / WEEKDAY EXTENDED LANE CLOSURES

As noted in the Lane Closure Policy, weekend and daytime lane closure requests are generally not desirable for the Turnpike and its customers. Therefore, during design, such requests are made in a Weekend or Extended Weekday Lane Closure Memo and are to include sufficient justification of need by the EOR (or requester) and a current LCA.

For Construction activities requiring a weekend or extended weekday lane closure, the following applies:

1. Review/justify construction activities and show that weekend lane closures are needed.
2. Include data in a tabular format that includes the following:
 - a. Description of work (i.e. deep mill, pave, cool time, etc.)
 - b. Length of work
 - c. Production rate
 - d. Time to complete work
 - e. Days to complete work
3. Look at impacts to traffic and provide mitigation (i.e. alternate routes, detours, diversions, early DMS or PCMS notification, Smart Work Zone).
4. Include the number of weekends or days, days of the week, begin/end time, and all other applicable information on the TTCP plans and in the Weekend Lane Closure Memo.
5. Appendix to include the following:
 - a. Appropriate FDM 241 Lane Closure Worksheets
 - b. HCM analysis (if applicable)
 - c. Applicable plan sheets
6. The Weekend Lane Closure Memo is to be submitted in the ERC prior to Phase II and approved before Phase III submittals. It will be processed as a separate ERC submittal.
7. Signature Requirements:
 - a. EOR
 - b. District Design Engineer
 - c. District Traffic Operations Engineer

Outside of design, daytime lane closure requests are made a minimum of two weeks in advance using a Lane Closure Request Form which shows sufficient justification for daytime and/or weekend closures and has an accompanying LCA to gain approval from Central Office.

PCMS

The requesting party is required to provide PCMS and accompanying messages in advance of the planned closure activity and during the implementation of the TTCP. The Department reviews and approves the message content required on all PCMS during the review and approval process for each requested closure.

Typical PCMS message content is designed per FDM 243 and is intended to detail the problem/action, location, and time of the closure for advanced notification. Lane closure information is to be updated when the lane is physically open and closed to traffic. Typical messages can be found on the [Florida's Turnpike Design website](#). Any deviations from the approved messages require coordination with Traffic Operations.

SUBMITTING A LANE CLOSURE REQUEST

ProjectSolve (<https://workflowapps.pbid.com>) is the current software used by the Turnpike to process lane closure requests.

Lane closure requests should be submitted into ProjectSolve by the appropriate department (Permits, Roadway Maintenance, Construction, Tolls, etc.). Confirm the lane closure request process with the appropriate department. All requests are to be submitted two weeks in advance of the closure date.

When submitting a request into the ProjectSolve application, separate lane closure requests are required for the following:

- Bi-directional closure requests (if different)
- Multiple ramp closures
- Daytime and nighttime closures at the same location(s) for different activities

Detour and traffic pacing operation plans are to be attached to the lane closure request in ProjectSolve.

HOLIDAY AND SPECIAL EVENT LANE CLOSURES

As holiday traffic increases on the Florida's Turnpike, providing all possible travel lanes and toll plaza lanes increases customer satisfaction and safety; therefore, no daytime or nighttime lane closures are permitted during the holidays without approval. Holidays are subject to the same restrictions as daytime and weekend lane closures.

A Holiday Calendar is developed by Florida's Turnpike Traffic Operations office each year for coordination with other stakeholders within Turnpike. This Holiday Calendar will be reviewed bi-annually and subject to change. The Holiday Calendar Lane Closure Restrictions and Special Events Lane Closure Restrictions are posted on the [Florida's Turnpike Design website](#).

Submit a request to the FTE Public Information Office for information on additional special events impacting specific regions of the Turnpike system; otherwise, special events are identified during design. Special events of regional significance are reviewed by the Construction Engineer and Inspector to determine impacts to a lane closure. The lane closure work period is to be adjusted to decrease impacts to the motoring public during special events.