Background
It is in the national interest to preserve and enhance the Interstate System to meet the needs of the 21st Century by assuring that it provides the highest level of service in terms of safety and mobility. Full control of access along the Interstate mainline and ramps, along with control of access on the crossroad at interchanges, is critical to providing such service. Therefore, the FHWA decision to approve new or revised access points to the Interstate System under 23 USC 111 must be supported by substantiated information justifying and documenting that decision. A new Policy on Access to the Interstate System was announced on May 22, 2017 effective immediately. The new policy focuses on the technical feasibility of a proposed change in access and eliminates duplication with other project reviews. Due to the complexity of adding or revising Interstate access, FHWA has developed an Interstate System Access Information Guide (hereinafter referred to as Guide) that clearly defines and explains what should be included in the request for changes in Interstate access submitted by MoDOT to the FHWA Division Office. The Guide will only be available on-line as a living document similar to MoDOT’s Engineering Policy Guide (EPG). This document outlines FHWA Division procedures that supplement the Guide.

FHWA Order M1100.1A was issued on November 25, 2014 to revise FHWA Delegation of Authority for approvals of Interstate Access Requests.

MAP-21 provided FHWA the opportunity to allow State DOTs the option of reviewing and approving Interstate Access Requests or Access Justification Reports (AJR) through the use of a programmatic agreement. A memorandum effective August 22, 2013 was issued that encouraged programmatic agreements for processing Interstate Access Requests, and was superseded by an April 26, 2016 memorandum that reflected the FAST Act changes in the applicable types of requests. The programmatic agreement can include the following types of requests:

1. New or modified freeway-to-crossroad (service) interchanges (including those within TMA); and
2. Completion of basic movements at existing partial interchanges.

As of 09/11/2017, MoDOT was not interested in the programmatic agreement option.

AJR Required
The Guide clearly states which access changes will require FHWA review and action in Section 3.3.1. If an AJR is required, MoDOT shall follow the process outlined in the Guide and below in the Design/Bid/Build or the Design/Build sections. The Interchange Design Promptlist will be utilized by the FHWA Division representative during the review process. The Guide does not clearly state when FHWA Headquarters (HQ) approval is necessary for an AJR, therefore a Delegation of Authority for Access Approval link has been provided for clarification. AJR review times for MoDOT and FHWA Division are established in the Design Partnering Agreement between MoDOT and FHWA Division.

AJR May Not Be Required
The FHWA Division Office will assist MoDOT in determining the level of effort necessary for those projects that may not require FHWA review and action as stated in Section 3.3.2 of the Guide. Although access approval may not be needed; coordination with FHWA Division is necessary to determine if any analysis is required based on the context of the project. If it is determined these changes may require an analysis of the planning, environmental, design, safety, and/or operations of the proposed improvements, MoDOT shall coordinate with the FHWA Division to determine the type and extent of analysis required. If an analysis is necessary, a meeting between FHWA Division representatives and MoDOT Project Manager/Project Director and Design Liaison Engineer must be scheduled early in the process to explicitly define the purpose and need, project goals and objectives, and establish the project study framework. FHWA Division has determined a minimum level of effort required for the following changes to Interstate facilities, however each project will be reviewed on a case-by-case basis.

Safety and Operational Analysis (see Definitions) May Be Required at a Minimum:
- Modification or reconstruction of intersections at the ramp terminus (i.e. change Unsignalized to Signalized or Roundabouts, change to Diverging Diamond).
- Construction of new or relocation of existing C/D or outer road systems that impact intersections with the crossroad.
- Shift of a ramp's termini location within the same interchange configuration, which results in ramp spacing that meets FHWA's design criteria. If the interchange is reconfigured in such a way that the travel patterns change with the same number of access points, coordination of the project should be performed with FHWA Division Office to determine the type of review and process to be considered. Changing the location of a ramp could result in changes to the safety and operational performance of the Interstate System.
- Addition of lanes to an on-ramp.
- Addition of a single auxiliary lane between two adjacent interchange ramps where the single auxiliary lane does not function as a mainline travel lane.
- Modification of the length of acceleration or deceleration lanes involved with any ramp.
- Improvement of traffic signals at ramp termini with local roads should be reviewed to ensure that the changes in the signalization do not result in queue spillback into the mainline lanes of the Interstate and that sufficient storage is provided.
- Implementation of ramp metering or other active control of vehicles entering the Interstate System.
- Relocation or shifting of the existing on-ramp or off-ramp termini (i.e., moving the ramp end that connects with the local road) along the same roadway.
- Addition of left-turn storage lanes, right-turn storage lanes, and through travel lanes at the terminus of existing ramps.

Safety and Operational Analysis May Not Be Required:
- Construction of new signing, striping, and/or resurfacing of an Interstate on-ramp or off-ramp, where geometric features are not changed.
- Installation of roadside guardrail and concrete barriers (such as for resurfacing and safety projects).
- Rehabilitation of existing grade separation structures that do not change the interchange configuration.
- Construction of overpasses or grade separation structures without ramps along Interstate facilities. The approval of air-rights over Interstate facilities is addressed as part of the location and design concept acceptance with the NEPA process and approval of plans, specifications, and estimate.

**Design-Bid-Build**

If an AJR is required on a Design-Bid-Build project, MoDOT shall follow the process outlined in the Guide and these general steps to provide the best results and FHWA Division responses on AJR proposals.

1. Meeting between FHWA Division representatives and MoDOT Project Manager and Design Liaison Engineer must be scheduled early in the process to explicitly define the purpose and need, project goals and objectives, and establish the project study framework.
2. Draft AJR submittal to FHWA, include a completed copy of the FHWA Policy Points Promptlist for review by the FHWA Division representative and if available Conceptual Study Report, Design Exceptions, and NEPA determination.
3. Meeting between FHWA Division representatives and MoDOT Project Manager and Design Liaison Engineer is needed to present the project, discuss the progress, and answer questions.
4. Formal AJR submission stage
   a. Conceptual AJR (see Definitions) submittal to FHWA including Conceptual Sign Plans for Conceptual AJR approval, generally used when NEPA Approval (see Definitions) is not complete or there are other conditions to final approval
   b. Final AJR approval

FHWA Division Office will work with MoDOT to achieve the proper level of effort required on a case-by-case basis.

**Design-Build**
If an AJR is required on a Design-Build project, MoDOT shall follow the process outlined in the Guide and these general steps to provide the best results and FHWA Division responses on AJR proposals.

1. Meeting between FHWA Division representatives and MoDOT Project Director and Design Liaison Engineer must be scheduled early in the process to explicitly define the purpose and need, project goals and objectives, and establish the project study framework.

2. Draft AJR submittal to FHWA, include a completed copy of the FHWA Policy Points Promptlist for review by the FHWA Division representative.

3. Meeting between FHWA Division representatives and MoDOT Project Director and Design Liaison Engineer is needed to present the project, discuss the progress, and answer questions.

4. Conceptual AJR (see Definitions) submittal to FHWA including any Design Exceptions for Conceptual AJR approval.

5. Design/Build teams submit proposed modifications (“modified AJR”) to the approved Conceptual AJR, includes Safety and Operational Analysis, any associated Design Exceptions, and Conceptual Sign Plans.

6. Meeting between FHWA Division representatives and MoDOT Project Director and Design Liaison Engineer is needed to discuss the proposed modifications.

7. Final AJR submittal to FHWA for Final AJR approval after NEPA Approval (see Definitions) is complete (normally after Apparent Best Value Selection).

FHWA Division Office will work with MoDOT to achieve the proper level of effort required on a case-by-case basis.

**Future Interstate**

In the event that a route has been approved for future interstate designation, MoDOT shall contact the FHWA Division representative to determine what may be necessary to ensure compliance with the interstate access requirements. Each project will be reviewed on a case-by-case basis.

**Definitions**

**Conceptual AJR** - This document is intended to identify fatal flaws and to help ensure the investment in the subsequent phases of production, including preparation of any environmental documents, is not wasted. The Guide refers to this as the first step or finding of operational and engineering acceptability in accordance with the eight Policy Points. This document could take a high level look at the safety and operational analysis for the types of access changes that are being considered without the detailed design information that will be necessary for the Final Approval. The document may be used to provide multiple interchange alternatives or an alternatives analysis identifying the preferred alternative. It requires consideration of all of the eight Policy Points identified in the Guide, including a safety analysis, identification of LOS for all movements comparing existing, no-build, and design years, and Conceptual Sign Plans. These considerations provide confidence that there are no fatal flaws in the proposed change in access, and that those alternatives can reasonably be included as part of the NEPA document. It is not anticipated that environmental studies will be completed; however, the largest foot print of the multiple interchanges identified in the AJR must be reviewed and should contain adequate information to identify potential flaws, substantial environmental requirements, and the potential for public controversy. If potential flaws are identified, close coordination with the FHWA Division Office and MoDOT is needed to determine if the project should move forward, and if it does, under what conditions. A potential risk for MoDOT is associated with AJRs that require FHWA HQ approval. FHWA HQ does not provide a Conceptual AJR approval. However, the FHWA Division Office will coordinate and discuss the Conceptual AJR with FHWA HQ to ensure they have a good understanding of any issues involved with the AJR. This coordination should help facilitate a successful Final AJR approval by the FHWA HQ.

**NEPA Approval** – Even though the AJR information prepared for the Conceptual AJR may contain a range of alternatives, the NEPA approval must be based on a selected preferred alternative. Therefore the preferred alternative identified in the Conceptual AJR must be selected and form part of the preferred alternative described and evaluated in the NEPA document. If appropriate, the Conceptual AJR analysis of multiple alternative interchanges can be included as a technical appendix to the NEPA document. NEPA approval (CE, FONSI, or ROD) may be granted at the Conceptual AJR stage if no fatal flaws are identified and the environmental analysis and corresponding coordination is satisfactorily completed and incorporated into the NEPA document. Final AJR approval can only be given by FHWA upon successful completion of the
NEPA document, even if no Federal funds are used. This Final AJR approval is contingent on the consistency of the selected NEPA alternative with the approved Conceptual AJR. If the Final AJR includes any changes to the approved Conceptual AJR or the preferred alternative included in the NEPA document, a re-evaluation of the NEPA document will be required.

**Safety and Operational Analysis** – The safety and operational analysis performed needs to include all elements of the Interstate facility (which includes mainline lanes, collector-distributor roads, existing, new, or modified ramps, ramp intersections with crossroad) and the local street network. The analysis should provide a comparison of the existing, no-build, and build conditions that are anticipated to occur in the opening year through the design year of the project. The analysis should demonstrate the engineering and operational acceptability of the proposed changes. Requests for proposed changes must include a description and assessment of the impacts and ability of the proposed changes to safely and efficiently collect, distribute and accommodate traffic on the Interstate facility, ramps, intersection of ramps with crossroad, and local street network, when compared to the existing conditions. When considering the impacts of various alternatives, priority needs to be given to the performance of the Interstate System within the context of the local planning, environmental, design, safety, and operational conditions. Chapter 7 and 8 of the Guide discuss the safety and operational considerations respectively. These chapters describe in detail the analysis that may be required to verify the performance of the Interstate based on the proposed change. FHWA Division Office will work with MoDOT to achieve the proper level of effort required on a **case-by-case basis** and may require more analysis than the minimums listed above, including but not limited to Conceptual Sign Plans.

**References**

- Policy on Access to the Interstate System dated May 22, 2017
- Federal Register Volume 74 Number 165 Notice of Revised Policy Statement dated August 27, 2009
- Interstate System Access Informational Guide
- FHWA Policy Points Promptlist
- Interchange Design Promptlist
- August 22, 2013 Memorandum on PAs (superseded)
- April 26, 2016 Revised Memorandum on PAs
- November 25, 2014 FHWA Order M1100.1A Revisions to FHWA Delegation of Authority
- FHWA website for Interstate Regulations, Policy and Guidance

**Useful Tools:**

- Sample Outline for Interstate System Access Requests