



STATE OF INDIANA INTERSTATE ACCESS REQUEST PROCEDURES

PURPOSE OF DOCUMENT

The following is an outline of Interstate Access Justification Request (IAJR) Procedures for analysis and documentation in relation to INDOT requests to FHWA for changes in Interstate System access. The record of that analysis in the form of answers to the Interstate Access Policy Points addressing *engineering and operational acceptability* is presented in an Interstate Access Justification Request (IAJR), herein referred to in the State of Indiana as an Interstate Access Request (IAR)

There is agreement between FHWA and INDOT that the procedures must be followed by any party conducting such work, whether internal INDOT staff or agents acting on behalf of INDOT, to ensure shared expectations are met and the formal access change request is efficiently processed. These procedures apply to access changes on the existing Interstate System only and not to new Interstate highways or non-Interstate highways.

Study requirements will differ depending on the complexity of the site in question. Highway routes through heavily developed urban areas with high traffic volumes will undergo a higher level of scrutiny than routes through sparsely populated rural areas with lower traffic volumes. The complexity will affect the limits of the study area, the level of analysis, the measures of effectiveness displayed as evidence in the IAD and the required level of detail of geometric layouts. Other factors such as interchange spacing, and extent of treatment may elevate study requirements as well.

Note that non-standard or otherwise complex concepts will require relatively well-developed design drawings to support the FHWA's determination of engineering and operational acceptability.

BACKGROUND

U.S. Federal Register notice of August 27, 2009, defines the FHWA policy on requests by states for new or revised access to the existing Interstate System, supplementing earlier notices in the Register on this topic of October 22, 1990, and February 11, 1998. An updated Policy on Interstate Access was issued on May 22, 2017 (not as a Federal Register Notice) that redefines the policy points reducing them from eight to two, placing the primary focus for determination of *engineering and operational acceptability* on safety, operational and engineering issues. The remaining 6 topics, now removed from the policy, are expected to be covered in the National Environmental Policy Act (NEPA) document.

The *Interstate System Access Information Guide* states in Section 2.6, "The policy includes the requirements for the justification and documentation necessary to substantiate any request that is submitted [by the state DOT] to FHWA for approval." The policy outlines core considerations and requirements of requests to change an Interstate access point — the questions that must be answered to FHWA's satisfaction. A key part of that overall requirement is operations and safety: "An operational [mobility] and safety analysis has concluded that the proposed change in access does not have a significant adverse impact on the safety and operation of the Interstate facility..."

INDOT must submit requests for proposed changes in access to the FHWA Indiana Division Office for review and approval. Only INDOT is authorized to present such a request to FHWA. MAP-21 for the



first time permitted FHWA and state DOTs to enter into a programmatic agreement for the purpose of assigning the latter party the responsibility and authority to process (review and approve) specific types of Interstate System access changes, at least relative to safety, operational and engineering acceptability. INDOT has fully executed such a formal agreement with FHWA Indiana Division Office (attached).

In addition, new or revised access to the existing Interstate System must comply with planning and environmental review process of relevant parts of the Code of Federal Regulations (CFR). FHWA approval of an access change is a Federal action and therefore must conform to NEPA among other Federal rules. Agreement by FHWA to engineering and operational acceptability by itself does not permit the state to execute the change. Therefore, full approval to change access is generally completed in two steps: initial acceptance of engineering and operational acceptability, then, full approval to change access through completion and approval of the NEPA document.

CODE OF FEDERAL REGULATIONS LANGUAGE

The Indiana Department of Transportation (INDOT) and the Federal Highway Administration (FHWA) maintain extensive public asset and capital commitments in limited-access facilities, with particular emphasis on the Interstate Highway System. Pursuant to Title 23, Code of Federal Regulations (CFR), Part 624 (Interstate System Access), promulgated in December 2024 and effective December 9, 2025, specific mandates and administrative procedures govern State requests for, and FHWA evaluation of, proposed revisions to Interstate System access (accessible at <https://www.ecfr.gov/current/title-23/part-624>).

Any proposed modification to limited-access facilities introduces potential adverse impacts on traffic operational capacity, safety metrics, and the accommodation of corridor travel demand. To ensure proper administrative oversight of access determinations, FHWA has established regulatory requirements, and INDOT has adopted corresponding policies and procedures, governing the submission, review, and approval of Interstate Access Requests (IARs).

Determinations of engineering and operational acceptability shall be executed by FHWA in accordance with the processes prescribed in 23 CFR Part 624, or alternatively, via the expedited approval mechanism authorized under the *Programmatic Agreement Regarding the Review and Approval of Interstate Access Requests*, executed between the FHWA Indiana Division and INDOT on December 16, 2025. Supplemental guidance is available in the *FHWA Interstate System Access Informational Guide* (accessible at <https://www.fhwa.dot.gov/design/interstate/pubs/access/access.pdf>).

Interstate System Access – Title 23 CFR Part 624

Pursuant to Title 23, United States Code, Highways Sections 106 (23 U.S.C. 106) and 111 (23 U.S.C. 111), all agreements between the Secretary of the U.S. Department of Transportation (USDOT) and state departments of transportation including the Indiana Department of Transportation (INDOT) governing the construction of projects on the Interstate System shall stipulate that the State shall not add points of access to, or exit from, a project in addition to those approved by the Secretary in the project plans, without the prior approval of the Secretary. The Secretary has delegated the authority to administer 23 U.S.C. 111 to the Federal Highway Administration (FHWA), pursuant to 49 CFR 1.48(b)(10).



To facilitate administrative decision-making regarding proposed changes in access to the Interstate System in a manner consistent with the vision, goals, and long-range transportation plans of metropolitan areas, regions, and the State of Indiana, Title 23 CFR Part 624 (Interstate System Access) was promulgated and became effective on December 9, 2024. This regulation supersedes the previous May 22, 2017, FHWA Interstate System Access Policy.

FHWA's Interest with Changes in Interstate System Access

It is in the national interest to preserve and enhance the Interstate System to meet 21st-century infrastructure demands by ensuring it provides the highest level of service regarding safety and mobility. Accordingly, FHWA's regulatory interest is to verify that all new or revised access points:

- **Process-Driven Evaluation:** Are evaluated using a structured decision-making process based on comprehensive data and analysis of the planning, environmental, design, safety, and operational impacts of the proposed change;
- **System Alignment:** Support the intended purpose and functionality of the Interstate System;
- **Operational Integrity:** Do not introduce adverse impacts to the safety, capacity, or operations of the Interstate System;
- **Network Connectivity:** Connect logically to local roadway networks or other multimodal elements of the broader transportation system; and
- **Standard Compliance:** Are designed in strict accordance with all applicable engineering and design standards.

FHWA's Interstate System Access Requirements

Title 23 CFR Part 624 establishes the mandatory requirements that INDOT must fulfill to substantiate any access request submitted for federal approval. These requirements are codified under 23 CFR 624.7, effective December 9, 2024.

Regardless of the location or context of any proposed new or modified access to the Interstate System, requests should be accompanied by an Interstate Access Document (IAD) that demonstrates the proposal will not have a significant adverse impact on the safety and operation of the Interstate facility or on the local street network.

FHWA's determination to approve a modification request is strictly contingent upon the proposal successfully satisfying and documenting these criteria. Consequently, INDOT ensures these requirements are thoroughly documented within the formal Interstate Access Request (IAR) submittal package.

FHWA ACCESS INFORMATIONAL GUIDE

FHWA's August 2010 *Interstate System Access Informational Guide* explains "what should be addressed in requests for new or modified access to the Interstate System." It defines Interstate System Access Change Request as the formal petition made by a state DOT to FHWA. It states, "These requests are inclusive of the written documentation that supports the formal request.... States may retain any term they are currently using to identify these reports." INDOT uses the terms "Interstate Access Request" (hereafter referenced as "request") and associated "Interstate Access Document" or IAD. In any event, the request must be a standalone document; that is, it may not indirectly reference essential intent necessary to address the core questions by means of separate documents (e.g.,



feasibility study, engineering report, scoping report). All relevant information to answer the two policy points should be provided in the IAD.

Chapter Two of the *Informational Guide* lists the eight (two points for the IAD and six points for the NEPA Process) policy requirements, with expanded explanation. Chapter Three provides guidance on review and processing of requests and explains roles of FHWA and state DOTs in that process. Chapters Seven and Eight discuss traffic safety and operational (mobility) considerations.

The *Informational Guide* recommends that the IAD includes discussion of feasible alternative designs, including no-build (no-action) and build alternative(s). However, the principal content in the IAD should be on the single recommended alternative, meaning the answers to the two questions should be based solely on the recommended action. Non-recommended build options should be described, but not in detail. The IAD need not serve the function of comprehensive documentation of alternatives' development, performance, and selection.

The *Informational Guide* serves as the fundamental manual for Indiana/INDOT on procedure for analysis and documentation associated with an Interstate access change request. The *Guide* is freely available online (<https://www.fhwa.dot.gov/design/memos/100831.cfm>). Further methodology and requirements spelled out in this Procedures document supplement instructions of the *Informational Guide* and supersede in any case of conflict.



FIVE-STEP PROCESS

There are five sequential steps in the process for INDOT to secure authorization from FHWA to change Interstate access:

1. Conduct a Framework meeting and establish the framework for scope of study relative to alternatives' analysis, and record that in a concise *Framework Document*.
2. Carry out alternatives' analysis and document those activities and findings in a report — the *Alternative Evaluation Report* or similarly named.
3. Determine whether an Interstate Access Request to FHWA and its associated *Interstate Access Document* (IAD) are required, and if so, prescribe the nature or scale of that IAD.
4. Produce the Draft IAD and transmit to FHWA from INDOT the request for determination of *engineering and operational acceptability* along with the IAD and documentation supporting. This is the first of two approval phases.
5. Achieve Final IAR approval following FHWA acceptance of the NEPA document. The Draft IAD is updated to reflect that NEPA approval is complete, and final IAR approval is sought from FHWA. This is the second of the dual approval phases.

For any action/project that involves potential for change in Interstate access (e.g., new interchange construction, interchange modification), INDOT's Traffic Mobility Office shall serve as common path of coordination between FHWA and project development parties (for instance, INDOT's project team to evaluate/scope and design, or consultant acting on the Department's behalf). The former expects that protocol to be followed, to ensure consistent practice and clear communication and responsibilities.

There is a select position/person in INDOT's Traffic Mobility Office responsible for that continual relationship with FHWA on all matters of Interstate access. That coordinator has specific roles and authority in each of the five steps and therefore should be made aware of or invited to significant events/meetings related to the various products. For step #1, a draft of the *Framework Document* should be sent to the Traffic Mobility Office coordinator for review, who will ultimately sign off on it and secure concurrence signature from FHWA. For step #2, a draft of the *Alternative Evaluation Report* should be sent to the coordinator for review. In step #3, the coordinator is the person, in consultation with FHWA, who determines (a) if the proposed improvement meets conditions requiring formal request to FHWA for change in Interstate access and thus development of the companion *Interstate Access Document* (IAD), and (b) whether the ~~IAD~~ is *Major* or *Minor* and the traffic operations analysis is *Complex* or *Simple*. However, any recommended alternative is subject to approval of the final NEPA document. In step #4, the draft ~~IAD~~ should be sent to the coordinator for review. The coordinator has sole authority to formally transmit the request (letter) for *engineering and operational acceptability* of change in access, sent along with the supporting ~~IAD~~. And finally in step #5, following conclusion of environmental studies, the Traffic Mobility Office coordinator transmits the notice (letter) to FHWA requesting final approval to make the access change.



Step 1: Framework for Project Scope

A brief stand-alone record called a *Framework Document* should be developed early in the access request process that states the scope of study relative to alternatives analysis as discussed and agreed upon at the framework meeting. The document should have concurrence lines for INDOT and FHWA representatives to sign. Within the Framework Document, identify and address any issues, risks or challenges (environmental, utility, public involvement, geometrics, etc.) from the perspective of INDOT or FHWA that may delay the schedule or have an influence on interchange type selection.

Step 2: Alternatives Analysis and Selection

Alternatives analysis and its documentation, called an *Alternative Evaluation Report* should first be completed. Its findings will indicate if an IAR and associated IAD are required. If an IAR is not required for an interchange modification project, an *Alternative Evaluation Report* will still be required to identify the site, background information, deficiencies, alternatives, and proposals. The report will evaluate traffic operations and safety performance of each alternative regarding the interchange itself, and the mainline interstate as explained below. Preliminary traffic design elements including pavement markings, lighting, signals, and signing design are critical aspects of determining operational acceptability of an alternative. Additionally, maintenance of traffic sign design is a critical aspect of major interchange modifications, especially system interchange modifications where complex major diverge junction approaches go through changing conditions during the project.

Traffic Operations Analysis

Travel Forecast & Analysis Years/Periods

Appropriate, sanctioned traffic data provided or explicitly approved by the Technical Planning and Programming Division's Statewide Modeling and Traffic Counting Unit should be used as the basis for operational analysis for the IAR process. Describe in the *Alternative Evaluation Report* the methodology, including assumptions, used in developing those traffic numbers (consistent or otherwise calibrated with that used in the NEPA evaluation).

Discuss the analysis years to be used for operational analysis that will associate with existing conditions, opening year, any necessary interim periods, and design year for design periods. AM and PM peak periods, representative off peak and any other special periods (such as special events) if relevant should be included.

Complex vs. Simple Analysis within the *Alternative Evaluation Report*

As was noted earlier in the document, an IAD will be classified as either major or minor in scale and scope. Generally, a major IAD will require complex operational analysis and a minor IAD will only require simple operational analysis. There are exceptional cases where a major IAD will pair with simple analysis and vice versa. If the project is determined to be complex, then a higher degree of traffic operations analysis will be required than if the project is determined to be simple. The difference between major/minor and complex/simple will be determined on a case-by-case basis by INDOT and FHWA. Analysis requirements for each are shown below:



Complex

Analyze for no-build and alternatives in existing or open to traffic year and design year:

- Intersection network performance at and near interchange
- Mainline Interstate performance
- Ramp merge and diverge performance
- Weaving segment analysis (if applicable)
- Intersection network performance at and near adjacent interchanges on subject interstate route
- Network traffic simulation

Simple

Analyze for no-build and alternatives in existing or open to traffic year and design year:

- Intersection network performance at and near interchange
- Mainline Interstate performance
- Ramp merge and diverge performance
- Weaving segment analysis (if applicable)

The operational analysis should be extended as far along the mainline, including adjacent downstream and upstream interchanges, as necessary to establish the extent and scope of the impacts. The extent of analysis/simulation will be greater for complex analysis. This is particularly critical in urban areas with closely spaced interchanges. As a minimum, the operational impact on the mainline Interstate route between the proposed new or revised access and immediately adjacent existing downstream and upstream interchanges on either side must be analyzed (exceptions may be granted if adjacent interchanges are a significant distance away). The exact adjacent interchanges to be analyzed will be determined jointly by FHWA and the Department. Crossroad analysis is always required at the subject (core) interchange, between, through and outside of ramp terminals on the crossroad. Analysis of the crossroads of the adjacent downstream and upstream interchanges is normally not required in an IAD unless circumstances dictate otherwise.

The Highway Capacity Manual or associated software (HCS) shall be used for mainline interstate, weaving segment and ramp junction analysis. Synchro Traffic Signal software shall be used for signalized intersection analysis and simulation of signal networks. Interstate highway network simulation shall be done using modeling software such as Synchro SimTraffic, Vissim simulation software or Transmodeler. INDOT and FHWA will advise which simulation software is best for each project. All roundabout analysis shall be completed using Sidra Intersection software. The version of all software used shall be communicated to and approved by INDOT and FHWA before any analysis is performed.

Assumptions made during the analysis and simulation phase shall be discussed with and approved by INDOT and FHWA.



Analysis and Simulation Measures of Effectiveness (MOE)

The following MOE shall be used in the Interstate Access Document. Taken together, these MOEs provide a good overall evaluation of the merits of each alternative and ensure achievement of the stated objectives. All MOE shall be determined for the existing or open to traffic year, the design year and for any intermediate years as directed.

- Level of Service (LOS) as defined by HCM, or other approved guidance
- Delay in seconds per vehicle (intersection analysis)
- Average speed and density (mainline analysis)
- Travel time on network in time per vehicle
- 95% queue length for each intersection approach

Drawings are required as an attachment to the *Alternative Evaluation Report*. The drawing(s) shall show the functional elements of the existing and proposed conditions, including, as applicable, project limits, adjacent interchange(s) along the freeway, adjacent intersections along the crossroad, ramps to be added, ramps to be removed, modifications to existing ramps, relocation of ramp gores, configuration, geometrics, typical roadway cross sections, auxiliary lanes, acceleration and deceleration lanes, freeway and at-grade ramp terminals, C-D roadways, and right-of-way limits. In constrained situations a higher level of detail in the *Alternative Evaluation Report* may be required.

A drawing/schematic (or series of) should be provided showing the traffic volumes for all through and turning movements, as well as data on C-D roadways, local service roads, and origin-destination (O-D) travel particularly for weaving movements. The existing year AADTs should be identified for the mainline, crossroads, ramps, and intersections. The design year AADTs, morning and evening DHVs, representative off-peak hourly volumes and trucks percentages for each movement should be included.

A narrative of the assumptions used and reasons for any changes in the software default values should be included. Results of operational analysis, in the form of service levels for each element of the Interstate-route access facility, and for multiple years and periods of the day, should be clearly presented on a drawing/schematic.

The summary results should be provided for each element, e.g., weaving segments, basic freeway segments, freeway ramp merge and diverge segments, ramp proper, at-grade signalized and unsignalized ramp terminals (intersections), crossroad arterial and its intersections in the access influence area for existing (no-build) and proposed (build) conditions in the existing or open-to-traffic year and in the design year for morning, evening and representative off-peak periods.

Queue analysis should be provided as part of the traffic operational analysis for those points where significant queuing might be expected, such as at ramp junctions with the crossroad and at major intersections on the crossroad adjacent to at-grade ramp terminals.

All highway capacity and operations calculations must be included in an Appendix to the IAD. If the nature of the project entails a level of traffic operations analysis generating inordinately large



volumes of output, the bulk of the hand calculations and printout of the HCS or other software tools may be provided in electronic format if desired, rather than as a hardcopy.

Any adjacent interchange, or intersection adjacent to the core access point/interchange, which is found to have a LOS below D for any of its elements or other notably unacceptable MOE, must be clearly identified. The IAD must contain a discussion of the impact this will have, if any, on the new or revised interchange(s) and Interstate-route mainline. Potential mitigation measures to alleviate any adverse impacts to the core access point/interchange must be described to at least a concept level. An alternative would be to describe the mitigation measures in the IAD transmittal letter to FHWA or in a separate correspondence with FHWA.

Intersections at ramp terminals and along crossroads must be analyzed to determine if they could have a negative impact on Interstate-route operations. Basically, the crossroads must be capable of collecting and distributing traffic to and from the Interstate route. All stop-controlled and signalized intersections within 1200 feet of the ramp terminal must be analyzed for traffic operation. It may be necessary to analyze intersections on the crossroad beyond 1200 feet. The exact intersections to be analyzed along the crossroad will be determined jointly by FHWA and INDOT.

If the analysis shows that any adjacent intersection will operate at LOS of E or F in the design year, a LOS analysis must be done to determine the year the adjacent intersection becomes unacceptable, i.e., below LOS of D.

Any intersection that is shown to have a LOS of E or F in the open-to-traffic year or 7 years beyond must be investigated to at least a concept level to determine what needs to be done to make it operate at LOS of D or better in the design year, e.g., add lanes. In addition, it will be necessary to determine whether the failure is the result of normal traffic growth or the result of the interchange access change. The Department and the responsible local public agency will determine who will be responsible for any necessary intersection improvements outside of the interchange area (to adjacent intersections) and when they will be accomplished. The Department will notify FHWA of the action to be taken either in the IAD, the IAD transmittal letter, or by separate correspondence. Those adjacent intersections which are shown to have a LOS of E or F between years 7 and 20 (design year) will be monitored for needed improvements. The IAD or separate correspondence must identify who will be responsible for this activity.

Traffic Safety Analysis

Like with traffic operational analysis, generally a major IAD will require complex safety analysis and a minor IAD will only require simple safety analysis. There are exceptional cases where a major IAD will pair with simple analysis and vice versa. The difference between major/minor and complex/simple will be determined on a case-by-case basis by INDOT and FHWA. Analysis requirements for each are shown below:



Complex

Analyze safety performance of existing ramp, intersection, and segment (mainline and arterial, as relevant) elements. For each element, this will include, at minimum:

- 5 years of crash history
- Collision diagrams
- Discussion of relevant crash patterns
- Road safety indices (ICC/ICF)

Evaluate projected safety performance of alternatives, including proposed ramp, intersection, and segment (mainline and arterial, as relevant) elements. This will involve:

- Interactive Highway Safety Design Model (IHSDM) will be used for new alignment segments (such as new roadways, new major ramps at a system interchange), but not for modification of existing minor ramps, intersections, or segments.
- IHSDM will not be used for new construction of or modification to service interchanges.
- In cases where IHSDM analysis may not be appropriate (such as when alternatives are novel or vastly different), CRF/CMF or exposure methodologies described above may be appropriate.

Simple

Analyze safety performance of existing ramp, intersection, and segment (mainline and arterial, as relevant) elements. For each element, this will include, at minimum:

- 5 years of crash history
- Collision diagrams
- Discussion of relevant crash patterns
- Road safety indices (ICC/ICF)

Evaluate projected safety performance of alternatives, including proposed ramp, intersection, and segment (mainline and arterial, as relevant) elements. For each element, this will include, at minimum:

- Crash Reduction or Crash Modification Factors (CRF/CMFs) for proposed changes, if available.
 - If CRF/CMFs are not available, right angle exposure analysis utilizing conflict points and exposed volume is acceptable.
- Discussion of observed crash patterns and recommendations included in the alternative to address those patterns (e.g. adding lighting to address nighttime crash patterns)
- FHWA ISATe tool can be utilized for safety analysis of conversions between diamond forms of an existing interchange (e.g. diamond to DDI)



Traffic Design Plans

Complex

Traffic plans are required to be submitted as an attachment to the IAD to show proposed pavement markings, signal control, signing and lighting. Before an alternative is approved for *safety, operational, and engineering acceptability*, design will need to provide preliminary traffic plans (signing, lighting, and pavement markings). The purpose of this requirement is to cover geometrics that may influence traffic flow and/or have an impact on safety. The plans should include geometrics, pavement markings, horizontal and vertical alignments, signing, lighting and traffic control.

Simple

Traffic plans are not required to be submitted as part of the AER, however, preliminary pavement markings, signal control, signing and lighting, and maintenance of traffic concepts should be included (as narratives or conceptual plans) to guide selection of alternatives.



Step 3: Interstate Access Request Determination

A request from INDOT to FHWA to change Interstate access will not necessarily be required for each interchange modification proposal.

Situations that will require an IAR include but are not necessarily limited to:

- Establishing a new interchange
- Upgrading a service interchange (Interstate to non-Interstate) to system interchange (Interstate to Interstate)
- Major modification of an interchange
- Changing the essential type of interchange or form of a ramp
- Removal from service of select access points or ramps or an entire interchange
- Addition of gated access.

Situations that will not require an IAR:

- Any significant change to intersection control at the ramp terminals where the change will not affect mainline Interstate flow:
 - Conversion of a conventional diamond to diverging diamond, roundabout or single point. While this example does not require an IAR, extensive traffic analysis will be needed, and an *Alternative Evaluation Report* will be required.
 - Addition or removal of traffic signal control at the ramp terminals
 - Addition, lengthening, removal or shortening of auxiliary turn lanes at the ramp terminals on the ramps or side road approaches
- Minor horizontal or vertical realignment of a ramp
- Converting a taper type entrance or exit ramp to a parallel type ramp or vice versa
- Increasing or decreasing the length of ramp deceleration or acceleration sections
- Addition or removal of continuous auxiliary lanes between two adjacent interchange ramps

Although some situations do not require an IAR they may require additional information and coordination with the FHWA. A prime example of that is the last item listed above, on continuous auxiliary lanes.

If an Interstate Access Document is required, it will be classified as an *IAR-Major* or an *IAR-Minor*. A major IAR is expected to have extensive answers to the 2 policy points. These requests will be required where new interchange construction is proposed at particularly complex sites or in circumstances where the treatment is intense or novel. A minor IAR can have simple, shorter answers to the policy points, except for Policy Point #1 in select cases in which complex traffic operations analysis is necessary. An example of a minor IAR could be the conversion of a full cloverleaf interchange to a partial cloverleaf interchange type.



Steps 4 & 5: Content of Interstate Access Document (IAD)

Introduction and Project Description

The IAR should begin with a statement of the purpose of the document itself, which is to support and achieve engineering and operational acceptability by FHWA. Following should be a description of the project including project leads and proponents, background information, location, existing conditions, need and purpose for the project, funding status (including identification of any third parties contributing funds), proposed project schedule, prior studies, development team members and project layouts.

Project and Study Areas

The study area limits are normally larger than the project limits or location. The study area limits represent influential conditions such as traffic impacts and land use typically beyond the project limits.

After detailing the project's location and physical limits with both maps and a written description, clarify the study area boundaries on a map and include a written description of affected interchanges, intersections and streets, cities and counties with state road impacts, and local agency improvements. Identify specific intersections and interchanges within the study area that will be analyzed and to what degree. A larger study area will be required for complex Interstate access requests. At complex sites, this may involve one or more interchanges in each direction on the Interstate route as well as parallel routes and adjacent intersections to the proposed or modified interchange site.

Statement of Need and Purpose

The IAR should describe the need and purpose for the project. Detail the traffic operational safety deficiencies that make the project necessary. Describe what the project will do to eliminate the operational deficiency.

Framework

This section will restate (summarize) the agreed-upon scope of study with INDOT and FHWA, the *Framework Document*.

Alternatives and Proposal

The detailed explanation and analysis of all alternatives should be reserved for the *Alternative Evaluation Report*. Only the proposed treatment should be detailed extensively within the *Interstate Access Document* while the other alternatives can be briefly summarized.

Traffic Safety and Operations Analysis

Detailed traffic operations and safety characteristics of the preferred alternative should be included. The IAD should also include an evaluation matrix of the project alternatives to illustrate why one alternative is preferred.

Maintenance of Traffic Signing

Major system interchange modifications require a greater level of signing throughout the project duration similar to the permanent guide signing present before and after the project. Approaches to major diverge junctions on a major system interchange project need to be signed with large orange guide signing to ensure driver understanding and correct routing interpretation in construction zones.

The need for dedicated construction guide signing became evident on a major interchange modification when a patchwork of guide signing was placed on large overhead signs with temporary coverings and plaques that lead to driver misunderstanding of correct routing or confusion in the decision zone. While patching over the existing signs is more cost effective than buying new dedicated construction guide signs, the patchwork signing shown in the example below creates a significant cognitive load for the driver relative to sign clutter. Approaching at 45 mph in a construction zone, a driver may have only a few seconds to read and interpret the sign to decide on the correct lane assignment.



Specific maintenance of traffic guide signs that convey dedicated lane assignments create the best possible circumstance for drivers to understand changes that are made during construction of a complex system interchange project. Rather than a patchwork of corrective actions on an existing guide sign, the dedicated sign in orange color to denote the construction condition only, make lane assignments for specific routes and directions clear to the driver. It is important to keep these panel signs simple and relatively large to reduce cognitive load spent on interpretation. Examples below show successful orange guide sign implementation on a system interchange project.



Specific design of maintenance of traffic guide signing for system interchange projects should be coordinated with the Traffic Engineering Division Design and Mobility Offices and with the Work Zone Safety Office.



Responses to the Policy Points in accordance with the requirement of 23 CFR 624.

This section is a substantial portion of the IAD where the 2 Policy Points are answered to the satisfaction of FHWA. The 2 Policy Points to be covered in the IAD and remaining 6 topics to be covered in the NEPA document are listed below. For each of the criteria, the first paragraph (in italics) restates the language in the FHWA Policy on Interstate Access, unedited. The subsequent paragraphs serve to clarify the core statement. The NEPA document topics are shown below for awareness but will not be included in the IAD.

Interstate Access Policy Points

- 1. An operational and safety analysis has concluded that the proposed change in access does not have a significant adverse impact on the safety and operation of the Interstate facility (which includes mainline lanes, existing, new, or modified ramps, ramp intersections with crossroad) or on the local street network based on both the current and the planned future traffic projections. The analysis should, particularly in urbanized areas, include at least the first adjacent existing or proposed interchange on either side of the proposed change in access (23 CFR 625.2(a), 655.603(d) and 771.111(f)). The crossroads and the local street network, to at least the first major intersection on either side of the proposed change in access, should be included in this analysis to the extent necessary to fully evaluate the safety and operational impacts that the proposed change in access and other transportation improvements may have on the local street network (23 CFR 625.2(a) and 655.603(d)). Requests for a proposed change in access should 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 (23 CFR 625.2(a) and 655.603(d)). Each request should also include a conceptual plan of the type and location of the signs proposed to support each design alternative (23 U.S.C. 109(d) and 23 CFR 655.603(d)).*
- 2. The proposed access connects to a public road only and will provide for all traffic movements. Less than “full interchanges” may be considered on a case-by-case basis for applications requiring special access, such as managed lanes (e.g., transit, HOVs, HOT lanes) or park and ride lots. The proposed access will be designed to meet or exceed current standards (23 CFR 625.2(a), 625.4(a)(2), and 655.603(d)). In rare instances where all basic movements are not provided by the proposed design, the report should include a full-interchange option with a comparison of the operational and safety analyses to the partial-interchange option. The report should also include the mitigation proposed to compensate for the missing movements, including wayfinding signage, impacts on local intersections, mitigation of driver expectation leading to wrong-way movements on ramps, etc. The report should describe whether future provision of a full interchange is precluded by the proposed design.*

Except in the most extreme circumstances, all interchanges should provide for all basic movements. Partial interchanges (less than full interchanges) are generally unacceptable, in part because they have undesirable operational characteristics. Private road access is not permitted on the Interstate System.



NEPA Document 6 Topics

The remaining six policy topics formerly included in FHWA's Interstate Access Policy system need, consistency with regional and statewide plans, consideration of transportation system management strategies, land-use coordination, development impacts, and the status of the environmental review are not required elements of the Interstate Access Justification Report under the new 23 CFR 624 rulemaking. These topics are now addressed within the project's NEPA documentation, consistent with FHWA's separation of engineering justification from environmental and planning considerations. Although not included in this IAR, these topics remain important to FHWA's overall approval process and are fully evaluated in the NEPA document to demonstrate that the proposed access change is supported by system planning, coordinated with local agencies, and represents the most appropriate solution after reasonable alternatives have been considered.

1. *The need being addressed by the request cannot be adequately satisfied by existing interchanges to the Interstate, and/or local roads and streets in the corridor can neither provide the desired access, nor can they be reasonably improved (such as access control along surface streets, improving traffic control, modifying ramp terminals and intersections, adding turn bays or lengthening storage) to satisfactorily accommodate the design-year traffic demands (23 CFR 625.2(a)).*

The NEPA document (not the IAD) should demonstrate that an access point is needed for regional traffic needs and not to solve local transportation needs. It is of utmost importance to maintain the integrity and primary function of the Interstate System. The Interstate facility should not be permitted to become part of the local circulation system but should be maintained as the main regional and inter-state highway it was intended to be. All reasonable measures should be taken to provide local access and mobility by means of the non-Interstate network. Existing or possible future roads or streets in the vicinity of the Interstate facility should be evaluated or considered for use as connections to existing adjacent interchange ramps, in lieu of adding a new interchange or ramp(s).

2. *The need being addressed by the request cannot be adequately satisfied by reasonable transportation system management (such as ramp metering, mass transit, and HOV facilities), geometric design, and alternative improvements to the Interstate without the proposed change(s) in access (23 CFR 625.2(a)).*

All TSM strategies, including those that involve improvements to the existing non-Interstate roads and streets, should be fully explored (in the NEPA document) in lieu of new or revised access to the Interstate system.

3. *The proposal considers and is consistent with local and regional land use and transportation plans. Prior to receiving final approval, all requests for new or revised access must be included in an adopted Metropolitan Transportation Plan, in the adopted Statewide or Metropolitan Transportation Improvement Program (STIP or TIP), and the Congestion Management Process within transportation management areas, as appropriate, and as specified in 23 CFR 450 and transportation conformity requirements of 40 CFR 51 and 93.*



Coordination with strategic, long-term transportation plans should be ensured, so as not to have fragmented consideration of revised or added access. The NEPA document should include a discussion as to how the proposal fits into the overall transportation plans for the area and, if it is an addition to the current plans for the area, how it affects the current plans. The access proposal does not have to be included in official transportation plans or approved by metropolitan planning organizations (MPOs) or similar organizations prior to submittal to FHWA. However, if the project is within an MPO area, coordination with the MPO must occur. All such coordination must be completed before FHWA approval of the NEPA document and IAR. This should form part of the normal project development process. The expectation here is that any proposal is considered in view of currently known plans for transportation facilities or land use planning.

4. *In corridors where the potential exists for future multiple interchange additions, a comprehensive corridor or network study must accompany all requests for new or revised access with recommendations that address all of the proposed and desired access changes within the context of a longer-range system or network plan (23 U.S.C. 109(d), 23 CFR 625.2(a), 655.603(d), and 771.111).*

To the extent practicable, the Department will program, and thus allow coordinated analysis and project development, of logical Interstate segments which may include multiple access sites (interchanges).

5. *When a new or revised access point is due to a new, expanded, or substantial change in current or planned future development or land use, requests must demonstrate appropriate coordination has occurred between the development and any proposed transportation system improvements (23 CFR 625.2(a) and 655.603(d)). The request must describe the commitments agreed upon to assure adequate collection and dispersion of the traffic resulting from the development with the adjoining local street network and Interstate access point (23 CFR 625.2(a) and 655.603(d)).*

It is incumbent upon the Department and FHWA to ensure that the Interstate System is preserved and improved in an orderly and coordinated manner to serve the public and maintain the essential function of this most important highway network. Therefore, if private development is the impetus behind the need for access, it is necessary to coordinate efforts with the private party to develop the access to achieve mutual benefits with no safety or operational adverse impacts on Interstate-route users.

6. *The proposal can be expected to be included as an alternative in the required environmental evaluation, review and processing. The proposal should include supporting information and current status of the environmental processing (23 CFR 771.111).*

Information should be confirmed and reported relative to the status of the planning and NEPA processes with regard to the access request.



Appendices

Include all relevant content not captured in the body of the IAD, such as supporting maps, correspondence, traffic engineering and analysis input/output.