NEPA EA and EIS Guidance

Arizona Department of Transportation

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Abbreviations and Acronyms

AASHTO	American Association of State Highway and Transportation Officials
ADA	Americans with Disabilities Act
ADOT	Arizona Department of Transportation
AGO	Arizona Attorney General's Office
CE	categorical exclusion
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
COA	class of action
EA	environmental assessment
EIS	environmental impact statement
EJ	environmental justice
EP	Environmental Planning
EPA	U.S. Environmental Protection Agency
FHWA	Federal Highway Administration
FONSI	finding of no significant impact
LEDPA	least environmentally damaging practicable alternative
LEP	limited English proficiency
LPA	local public agency
MAP-21	Moving Ahead for Progress in the 21st Century Act
MOU	memorandum of understanding
NEPA	National Environmental Policy Act
NOA	Notice of Availability
NOI	Notice of Intent
PIP	*Public Involvement Plan*
PS&E	plans, specifications, and estimates
QA	quality assurance
QC	quality control
ROD	record of decision
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
STIP	Statewide Transportation Improvement Program
TIP	Transportation Improvement Program
Title VI	Title VI of the Civil Rights Act of 1964
TDM	transportation demand management
TSM	transportation system management
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish and Wildlife Service

1 Introduction and Overview

The U.S. Department of Transportation (USDOT) Surface Transportation Project Delivery Program (23 United States Code [USC] 327) allows the Federal Highway Administration (FHWA) to assign—and a state transportation department to assume—FHWA's responsibilities under the National Environmental Policy Act (NEPA) of 1969. The program is also referred to as NEPA Assignment.

The Arizona Department of Transportation (ADOT) has assumed FHWA's responsibilities for complying with NEPA for most highway projects in Arizona. Responsibilities associated with NEPA Assignment are identified in a memorandum of understanding (MOU) between FHWA and ADOT, dated April 16, 2019. The MOU outlines the responsibilities ADOT has assumed from FHWA, including review and approval of NEPA documents, interagency consultation and coordination, and environmental regulatory compliance. This guidance provides direction for preparing environmental assessments (EAs) and environmental impact statements (EISs) for projects falling under the full NEPA Assignment MOU between FHWA and ADOT. This guidance should be used in conjunction with other state and federal statutes, regulations, executive orders, and guidance.

NEPA Assignment

The NEPA Assignment program aims to streamline federally funded highway projects by allowing state transportation departments to assume full responsibility for NEPA for most projects, including EA and EIS projects.

1.1 Purpose

This guidance informs ADOT staff, local public agencies (LPAs), and consultants of the process and requirements to prepare EAs and EISs for ADOT projects with federal-aid funding or another FHWA nexus. It will also be useful for partnering agencies and other project stakeholders seeking a more thorough understanding of ADOT's procedures for developing EAs and EISs. The guidance will assist ADOT design staff, environmental practitioners, right-of-way professionals, and other specialists working together to effectively deliver projects that integrate sound engineering practices and environmental requirements.

1.2 Organization

This guidance identifies environmental requirements to be followed on highway projects under the NEPA Assignment program and to demonstrate compliance with the MOU. Table 1 summarizes the sections of this guidance document.

Table 1. Guidance overview

Section	Description
1 – Introduction and Overview	This section introduces the purpose of the guidance and its organization. It also introduces key environmental laws and regulations, provides background information on NEPA Assignment and its requirements, defines ADOT's organizational structure, and describes coordination with local agencies.
2 – When to Prepare an EA or an EIS	This section defines the NEPA classes of action, describing when each class of action applies and the steps for determining and documenting the class of action.
3 – Purpose and Need	This section identifies purpose and need requirements. The project purpose defines how the problem identified as the project need is going to be addressed.
4 – Development of Alternatives	This section describes the development of alternatives, how alternative development differs between an EA and an EIS, and what is required for each.
5 – Public Involvement	This section describes ADOT's public and agency involvement principles, summarizes associated federal and state public and agency involvement requirements, and discusses how these are addressed for ADOT projects.
6 – Quality Assurance/ Quality Control, Legal Review, and Conflict Resolution	This section discusses the applicable components of ADOT's *Environmental Planning Quality Assurance/Quality Control Plan* as it pertains to EAs and EISs. It also discusses legal reviews and conflict resolution.
7 – Process for Developing an EA	This section describes ADOT's process for developing an EA, including timing of agency coordination and public involvement and document reviews and approvals.
8 – Process for Developing an EIS	This section describes ADOT's process for developing an EIS, including timing of agency coordination and public involvement and document reviews and approvals.
9 – EA and EIS Re-evaluations and Supplemental EISs	This section describes when a re-evaluation of a previously approved EA or EIS is necessary, and the process ADOT follows to develop a re-evaluation. It also discusses the circumstances under which a supplemental EIS would be warranted and the process ADOT follows to prepare a supplemental EIS.
10 – Environmental Commitments	This section describes how mitigation measures and environmental commitments are documented in an EA and EIS.
Appendix A – Contents of an EA and EIS	Appendix A provides an outline of the contents of an EA and EIS, with guidance for preparing each chapter and section.

1.3 Environmental Laws and Regulations

This guidance identifies applicable environmental laws and regulations that ADOT must follow as part of the NEPA process. Section 1.3.1 discusses NEPA, and Section 1.3.2 discusses other federal and state environmental laws and regulations.

1.3.1 National Environmental Policy Act

NEPA was signed into law on January 1, 1970, and the Council on Environmental Quality (CEQ) was created to oversee the implementation of NEPA and its associated regulations (40 Code of Federal Regulations [CFR] 1500 to 1508). Federal agencies are required to develop, and follow, NEPA implementing regulations that are consistent with CEQ regulations. To address CEQ regulations, FHWA issued 23 CFR 771, Environmental Impact and Related Procedures, to provide direction for implementing NEPA for transportation projects that fall under FHWA's purview. Additionally, FHWA Technical Advisory T 6640.8A, Guidance for Preparing and Processing Environmental and Section 4(f) Documents, offers guidance for content and format and for processing NEPA documents and associated environmental studies.

Through NEPA Assignment (23 USC 327), ADOT has assumed FHWA's NEPA responsibilities for most of the federal-aid transportation projects in Arizona. Under the NEPA Assignment program, ADOT is the NEPA federal lead agency for assigned projects and assumes FHWA's responsibilities for:

- environmental review and documentation
- interagency consultation and coordination
- regulatory compliance

As part of its responsibilities under NEPA Assignment, ADOT determines whether federal-aid highway projects would result in significant impacts on the environment, conducts all necessary environmental studies, addresses mitigation and environmental commitments, and prepares all environmental documentation for projects in the NEPA Assignment program. Section 1.4 provides additional information on NEPA Assignment.

1.3.2 Federal and State Environmental Laws and Regulations Other Than NEPA

The preparation of NEPA documents requires consideration of numerous federal environmental laws, regulations, and executive orders and State of Arizona environmental statutes and regulations. Consideration of these federal and state laws and regulations falls under the FHWA concept of the "NEPA umbrella" and requires consultation, coordination, and regulatory compliance with a range of federal and state agencies, as well as Native American tribes.

Under the NEPA Assignment program, ADOT assumed FHWA's responsibilities for environmental review and documentation, interagency consultation and coordination, and regulatory compliance for all assigned projects. See Section 3.2.1 of the NEPA Assignment program MOU for the list of federal environmental laws for which ADOT is

charged with complying under NEPA Assignment. Procedures for addressing these additional requirements are presented in this guidance.

Some environmental review responsibilities outlined in MOU Section 3 remain the responsibility of FHWA, as follows:

- air quality conformity responsibilities required by Section 176 of the federal Clean Air Act, as described in 42 USC 7506
- planning responsibilities under 23 USC 134 or 135, or under 49 USC 5303 or 5304 (MOU Section 3.2.4)
- government-to-government consultation with Native American tribes, as defined in 36 CFR 800.16(m) (MOU Section 3.2.3)
- determination that a significant encroachment into a floodplain is the only practicable alternative, under 23 CFR 650.113 and 650.115 (MOU Section 3.2.1 – Executive Orders Relating to Highway Projects, E.O. 11988, Floodplain Management)

1.4 NEPA Assignment

Section 6005 of the 2005 federal transportation bill—the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)—established a pilot program under which FHWA could assign its full NEPA project-level decision-making responsibilities to up to five states.

SAFETEA-LU also included a Categorical Exclusion (CE) Assignment program (Section 6004 of 23 USC 326), which allowed FHWA to assign states the responsibility for determining whether a project is categorically excluded from the requirement to prepare an EA or EIS. ADOT received CE Assignment on January 3, 2018, through execution of an MOU between ADOT and FHWA's Arizona Division. The CE Assignment program covers:

- Activities and activity examples listed in 23 CFR 771.117(c) and (d). These generally involve minor or common construction activities and require varying levels of documentation to support the CE determination. ADOT refers to these as "listed CEs."
- Any future activities that FHWA promulgates as CEs through rule making.

Projects that qualify for a CE but are outside of the criteria listed above (listed CEs) are not eligible for CE Assignment.

The 2012 federal transportation bill—the Moving Ahead for Progress in the 21st Century Act (MAP-21)—expanded FHWA's authority to assign its full NEPA project-level decision-making responsibilities to all interested states. ADOT and FHWA signed an MOU on April 16, 2019, under the authority of 23 USC 327, through which FHWA assigned its full NEPA project-level decision-making responsibilities to ADOT. This NEPA Assignment program covers all NEPA classes of action: CE activities not assigned to ADOT under its CE Assignment, EAs, and EISs.

ADOT will continue to coordinate with FHWA's Arizona Division on ADOT projects that are excluded from NEPA Assignment, as outlined in Section 3.3.2 of the MOU.

As a requirement for entering NEPA Assignment, the State of Arizona agreed to waive its federal constitutional right to sovereign immunity under the Eleventh Amendment of the U.S. Constitution. This occurred through Arizona Senate Bill 1211, which was signed into law on March 22, 2017. Senate Bill 1211 amended the Arizona Revised Statues Chapter 2, Article 2, Section 28-334, Subsection C, to allow ADOT to assume federal environmental review responsibility and to waive sovereign immunity for the limited purposes of NEPA Assignment. The State of Arizona, rather than FHWA, is legally liable and responsible for its decisions and actions on projects under the NEPA Assignment program, including any action for compliance, discharge, and/or enforcement of any of the responsibilities assumed by ADOT.

Pursuant to Section 3.2.1 of the ADOT NEPA Assignment MOU, the cover page of each EA, FONSI, EIS, and record of decision (ROD); EIS Notice of Intent (NOI); draft and final EIS Notice of Availability (NOA); and related documentation prepared under the authority granted by this MOU, and for any memorandum corresponding to any CE determination it makes under the terms of the MOU, ADOT will insert the following language in a way that is conspicuous to the reader or include it in a CE project record:

> *The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by ADOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated April 16, 2019, and executed by FHWA and ADOT.*

1.5 ADOT Environmental Structure and Responsibilities

ADOT Environmental Planning (EP) is responsible for environmental coordination and approvals for federally funded highway and roadway improvement projects in Arizona. This includes all environmental studies and analyses, mitigation and environmental commitments, NEPA documentation, coordination and consultation for regulatory approvals, and permitting.

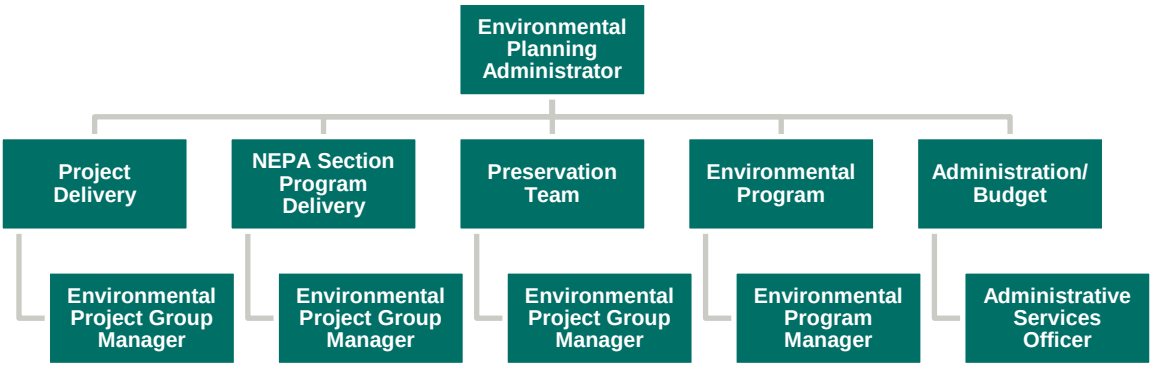
ADOT EP has the following sections:

- **Project Delivery**: This section is primarily responsible for CEs outside the Maricopa Association of Governments region (covering the Phoenix metropolitan area) and LPA projects.
- **NEPA Section Program Delivery**: This section has a variety of functions, including preparing NEPA documents for major projects (EAs, EISs) statewide as well as CEs in the Maricopa Association of Governments region. This section also works on special projects related to sustainability, resilience, and innovation.
- **Historic Preservation Team**: This section is responsible for archaeological and historical resources evaluations and consultation under Section 106 of the National Historic Preservation Act of 1966.
- **Environmental Program**: This section includes technical experts in various resource areas (with the exception of cultural resources), including biological resources, water resources, hazardous materials, air quality, noise, and standards and training.

- **Administration/Budget**: This section includes the ADOT EP administrator, an administrative services officer, a management analyst, and a procurement technician.

Figure 1 shows the organization of ADOT EP.

Figure 1. ADOT Environmental Planning organization



1.6 Working with Local Agencies

LPA projects follow the same environmental approval processes and are reviewed and approved following the same standards as ADOT-sponsored projects. When LPA environmental documents are submitted to ADOT, they are subject to the same quality assurance (QA)/quality control (QC) reviews as performed on ADOT projects and are reviewed to the same standards as ADOT projects. LPA project environmental documents will also be subject to the same legal reviews and legal sufficiency reviews, when applicable.

ADOT EP has developed guidance specific to environmental documents prepared for federal-aid LPA projects; this guidance is included in the ADOT *Local Public Agency Projects Manual*.

2 When to Prepare an EA or an EIS

For every federally funded project or project requiring federal approval, a class of action (COA) is identified. ADOT EP assesses each project to determine the appropriate COA. Determination of the COA includes consideration of potential environmental impacts. This section identifies the COAs and discusses considerations for determining the COA.

2.1 Classes of Action

FHWA's NEPA regulations identify three environmental COAs (23 CFR 771.115), each having different documentation and compliance requirements:

- **EIS (Class I)** [23 CFR 771.115(a)]: Actions that significantly affect the environment require an EIS (40 CFR 1508.27). EIS documentation requirements include an NOI, draft EIS, final EIS, and ROD. See Section 8 of this guidance for EIS preparation and processing information.
- **CE (Class II)** [23 CFR 771.115(b)]: Categories of actions that do not individually or cumulatively have a significant environmental effect are excluded from the requirement to prepare an EIS or EA. These actions are approved with a CE determination.

  Actions that typically meet the definition of a CE are identified on two specific lists, commonly referred to as the "(c) list" [23 CFR 771.117(c)] and the "(d) list" [23 CFR 771.117(d)]. Actions on the (c) list generally involve minor or common construction activities and activities that do not lead to construction. The (d) list presents examples of actions generally found appropriate for CE classification, but that require documentation to support the CE determination. Additional actions of a similar type or scope of work may also be determined to qualify for the CE determination. See the ADOT CE Checklist Manual for additional information on CE determinations.
- **EA (Class III)** [23 CFR 771.115(c)]: Actions for which the significance of the environmental impact is not clearly established require an EA. An EA is used to determine whether the environmental impacts are significant and whether there will be a need for further analysis and documentation. An EA is a concise document that briefly provides sufficient evidence and analysis for determining whether to prepare an EIS or a finding of no significant impact (FONSI) (40 CFR 1508.9). See Section 7 for more information regarding preparing and processing EAs.

2.2 Identifying Significant Impacts

CEQ NEPA regulations (40 CFR 1508.27) provide guidance regarding the concept of "significance" when evaluating impacts. CEQ requires consideration of both context and intensity in determining significance.

Context requires that the action be analyzed in several contexts: societal, regional, and local. The setting will also affect the significance. *Intensity* refers to the severity of the impact.

The following should be considered when evaluating context and intensity (40 CFR 1508.27):

- consideration of beneficial and adverse effects
- degree to which the proposed action affects public health or safety
- unique characteristics of the geographic area, such as proximity to historical or cultural resources, parks, prime farmland, wetlands, wild and scenic rivers, or ecologically critical areas
- degree to which the effects on the quality of the human environment are likely to be highly controversial
- degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks
- degree to which the action may establish a precedent for future growth with significant effects
- whether the action is related to other actions with individually insignificant but cumulatively significant impacts—significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment, and significance cannot be avoided by identifying an action as temporary or by segmenting it into small component parts
- degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources
- degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973
- whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment

A project that results in significant impacts is a Class I project and requires an EIS.

2.3 Identifying the Class of Action

Major projects that require an EA or EIS require that specific funds be programmed for project development, including the NEPA process; therefore, ADOT makes a preliminary COA identification in the project's programming phase, where, for example, an EIS that requires that an NOI be published in the *Federal Register* is identified as the COA at that time. However, COA identification can occur at any point of the environmental review process from programming and preliminary design to NEPA approval.

3 Purpose and Need

This section discusses the key concepts and process related to preparing a purpose and need statement for a NEPA document based on CEQ NEPA regulations (40 CFR 1500 to 1508), FHWA NEPA regulations (23 CFR 771), and CEQ and FHWA guidance documents. The adoption of the purpose and need statement is one of the most important decisions that the lead agencies make in the NEPA process because the purpose and need statement provides the foundation and framework for determining which alternatives to consider and for selecting the preferred alternative (note that alternatives, especially a preferred alternative, are not discussed in the purpose and need statement, which serves as the basis for their identification, development, and analysis).

The project's need is the transportation problem, while the purpose is the intent to solve the problem. The purpose is a statement of the action to be taken and the goals and objectives that ADOT intends to fulfill as part of a successful solution to the problem. The need identifies the problem or problems that the proposed action is intended to address and explains, to the extent possible, the underlying causes of those problems. It provides data to support the stated problem and should include a discussion of existing conditions that need to be changed, problems remedied, deficiencies improved, decisions made, and policies or mandates implemented. Project needs are identified first; the project purpose follows.

3.1 Project Definition

To be considered a viable project in accordance with FHWA regulations and guidance, a clear need for the project must be demonstrated. A clear need might be safety, new access, the rehabilitation of an existing deficient highway or bridge, economic development, or capacity improvements, as examples. This need must be considered in the context of the natural, social, economic, and cultural environment; topography; future travel demand; and other related infrastructure improvement considerations.

To ensure meaningful evaluation of alternatives and to avoid commitments to transportation improvements before they are fully evaluated, three general principles are be used to define project alternatives. FHWA regulations at 23 CFR 771.111(f) specify any COA evaluated under NEPA must:

1. Connect logical termini and be of sufficient length to address environmental matters on a broad scope;
2. Have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made; and
3. Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

The general purpose and need for transportation projects should be identified well before they are presented in an EIS or EA. As required by 23 USC 134 and 135 and 49 USC 5303 to 5306, the transportation planning process requires ADOT, associated

metropolitan planning organizations, and other transportation organizations in Arizona to develop a long-range transportation plan to address projected long-term needs. From the long-range transportation plan and metropolitan transportation improvement programs (TIPs), the Arizona Statewide Transportation Improvement Program (STIP) is prepared, which lists priority projects to be carried out over a 4-year program to implement key projects of the long-range transportation plan. The TIP and STIP must reflect anticipated funding and priorities for programming, including transportation enhancements.

To receive federal funding, transportation projects must come from an approved STIP. As a result, much of the data and decision-making undertaken by state, regional, and local officials during the planning process are carried forward into the project development activities for projects in an approved STIP. This means that the planning process and the environmental compliance process should work in tandem, with the results of the transportation planning process feeding into the NEPA process. Ideally, the purpose and need for transportation projects should have their origins in the long-range transportation planning process. That is the point at which system-wide needs are analyzed and individual projects are moved forward for programming, design, and environmental evaluation. During the NEPA process for individual projects, the purpose and need are defined and refined to a greater level of detail so that the alternatives developed are as specific as possible to the project.

FHWA and the Federal Transit Administration issued a joint guidance document, *Linking the Transportation Planning and NEPA Process* (February 2005), to describe how the transportation planning process and the NEPA decision-making process can be improved by integrating them in a cohesive manner. This includes the early preparation of purpose and need statements and alternatives development.

The transportation planning process can provide the basis for the purpose and need statement in a NEPA document. For more information, see FHWA's website on Planning and Environment Linkages.[1]

3.2 Identifying the Purpose and Need

The purpose and need statement is the critical foundation of a NEPA document that provides the framework for decision making and for evaluating and screening alternatives. In basic terms, the purpose and need identifies the transportation problem to be solved by the proposed project and establishes why a project is being proposed and why its priority and funding expenditure are warranted. The project need provides the data to support the project purpose. It identifies the conditions that have resulted in the problem or set of problems that need to be remedied. The project purpose defines the solution to the problem (or need) and outlines the goals and objectives of the proposed action.

Importantly, the purpose and need drives the process for alternatives identification, evaluation, and in-depth analysis, and for the identification of a preferred alternative for the project. CEQ regulations require that an EA and EIS address the “no-action” alternative and, for an EIS, “rigorously explore and objectively evaluate all reasonable

[1] http://www.environment.fhwa.dot.gov/integ/index.asp

alternatives." Without a well-defined, well-established, and well-justified purpose and need statement, it will be difficult to determine which alternatives are reasonable, prudent, and practicable, and it may not be possible to compare or dismiss the no-action alternative.

The purpose and need section in a NEPA document should be defined in terms that are easily understandable to members of the general public because they will have an opportunity to review the section and provide input through ADOT's public involvement program. The purpose and need should justify why the project should be implemented. The information presented should be as comprehensive and specific as possible to justify the need. FHWA Technical Advisory T 6640.8A encourages using maps, graphics, tables, and similar visual aids to help the reader understand the project's purpose and need.

The primary elements of the purpose and need statement are identified and discussed in FHWA Technical Advisory T 6640.8A, which identifies and discusses key criteria for use in preparing purpose and need statements. All of the items listed below may not be applicable to every project, but those that are should be discussed in project-level NEPA documents (see the purpose and need section in Appendix A to this guide for a more detailed discussion of these items):

- project status
- system linkage
- existing and future conditions
- transportation demand
- legislation
- social or economic conditions
- land use
- modal relationships
- safety
- roadway or bridge deficiencies

Although most transportation projects stem from a transportation-related need such as substantial congestion, lack of access, safety problems, deteriorating infrastructure, etc., ADOT recognizes that economic development can be a primary or secondary element of the purpose and need for some highway projects, particularly in rural areas. In Arizona, an example is the communities along the border with Mexico where a number of land ports of entry are located. These ports of entry facilitate a substantial amount of trade with Mexico and Central America and are important to the overall economic development of these communities and Arizona.

3.2.1 Need for the Project

The need for the project establishes the transportation problem to be solved and describes why the problem needs to be addressed. Community goals and objectives that support the need should be discussed in the need section. The need section serves as the foundation for the proposed action and provides the principal information upon which the comparison of the proposed build alternatives and No-Build Alternative is based. This section establishes the rationale for pursuing the action and explains how the proposed action is consistent with local transportation planning, local comprehensive planning, land use planning, and growth management efforts.

The following examples of possible project needs are from FHWA Technical Advisory T 6640.8A:

- **System linkage**. Describe how the project fits into the existing transportation system, including whether it is a connecting link of that system.
- **Transportation demand**. Explain relationships to any statewide plan or other transportation plan together with the project's traffic forecasts, including whether such forecasts are substantially different at the preliminary design and NEPA stage of the project than those made during the planning stage (23 USC 134).
- **Capacity**. Describe how the capacity of the existing transportation system is inadequate for the present or projected system load. Define what levels of service are required for existing and proposed facilities.
- **Legislation**. Identify federal, state, or local governmental mandates that must be met by the project.
- **Social demands or economic development**. Identify all projected economic development/land use changes driving the need for the project, including new employment, schools, land use plans, and recreation.
- **Modal interrelationships**. Describe how the study evaluates modes of transportation as an alternative to highway travel and how the project interfaces with and complements other transportation features in the corridor, including existing highways, airports, rail and intermodal facilities, and mass transit services.
- **Safety**. Discuss the existing or potential safety hazards in the study area, including data related to existing accident rates, and other plans or projects designed to improve the situation.
- **Roadway deficiencies**. Describe any existing deficiencies associated with study area roadways (for example, substandard or outdated geometrics, load limits on structures, inadequate cross section, high maintenance costs).

The statement of need should be a factual, objective description of the specific transportation problem, with a summary of the data and analysis that support the conclusion that there is a problem requiring action. Quantified data—such as vehicle miles of travel, travel speeds, time of day characteristics, current and projected levels of service, accident rates, and/or road condition assessments—should be used where applicable. Full documentation, such as reports and studies developed during the project planning process, should be referenced in the need statement and must be available upon request of reviewing agencies and the public.

3.2.2 Purpose of the Project

The project purpose defines the solution to the problem and guides the alternatives that will be considered in response to the established need. The American Association of State Highway and Transportation Officials (AASHTO) Practitioners' Handbook 7, *Defining the Purpose and Need and Determining the Range of Alternative for Transportation Projects,* advises that the project purpose be clearly and succinctly stated, which can often be done in a single sentence. If the proposed project has several

distinct purposes, each should be separately listed. The following are examples of possible project purposes:

- improve traffic flow
- correct roadway deficiencies
- reduce congestion and delays
- modernize deteriorating facilities
- accommodate high traffic volumes
- increase safety for motorists, pedestrians, and bicyclists
- increase multimodal travel options
- provide lane continuity and balance
- optimize highway system operations
- improve mode connectivity
- improve connectivity among transportation modes
- improve pedestrian/bicycle mobility

3.3 Purpose and Need Statement for an EIS and EA

A purpose and need statement is required for all NEPA environmental documents prepared for ADOT review. CEQ regulations require an EIS to "briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action" (40 CFR 1502.13). For an EA, the regulations require a "brief discussion of the need for the proposal" (40 CFR 1508.9b).

The 23 USC 139 Efficient Environmental Review Process requires that all highway projects, along with transit and multimodal projects for which an EIS is prepared, follow a specified environmental review process. For a purpose and need statement in an EIS, 23 USC 139 states that the following objectives can be included:

- achieving a transportation objective identified in an applicable statewide or metropolitan transportation plan
- serving national defense, national security, or other national objectives, as established in federal laws, plans, or policies
- being consistent with approved planned land use or growth objectives established in applicable federal, state, local, or tribal plans

A proposed project's purpose and need should be well-defined and help refine the reasonable alternatives that should be analyzed to address the transportation problem.

The 23 USC 139 Efficient Environmental Review process also requires ADOT to give the public and participating agencies a chance to be involved in the development of the project purpose and need statement in a timely and meaningful way, including through project scoping. The opportunity for input must be publicized and may occur in the form of public workshops or meetings, solicitations of verbal or written input, the ADOT

website, distribution of printed materials, or other public outreach activities. The opportunity must be provided prior to ADOT's final decision regarding the purpose and need. The 23 USC 139 provisions are required for an EIS, and are discretionary—but rarely used—for an EA (the ADOT EP administrator would make this decision). See Section 8 for additional information on the requirements of 23 USC 139.

The purpose and need statement in an EIS and an EA is also vital to meeting the requirements of Section 4(f) of the Department of Transportation Act (49 USC 303), Executive Orders 11990 (Wetlands) and 11988 (Floodplains), and Clean Water Act Section 404(b)(1) guidelines (40 CFR 230). The Section 404(b)(1) guidelines are the only regulations other than NEPA that require a purpose statement. Section 404 requires selection of the least environmentally damaging practicable alternative (LEDPA) for implementation. Because of the stringency of Section 404 requirements, the importance of U.S. Army Corps of Engineers (USACE) review and concurrence on the purpose and need statement for projects that require a Section 404 individual permit cannot be overstated. For projects that require an individual permit, working closely with USACE and addressing 40 CFR 2310.10(a) and Section 404(b)(1) requirements in parallel with the NEPA process are essential for project success (FHWA 2015). It is noted further that a jurisdictional delineation—a preliminary jurisdictional delineation, in most cases—is prepared during the NEPA process to identify potential waters of the U.S. to gain an initial understanding of the type of Section 404 permit that may be required for a given project, such as a USACE nationwide permit or individual permit. Additionally, if an individual permit is required for a project, the individual permit process is undertaken during the final design stage. For a Tier 1 EIS, a lesser Section 404 level-of-effort may be needed because project construction is not part of the ROD for this type of EIS. Actual construction would or may occur during subsequent and more project-specific NEPA actions, depending on the focus of the Tier 1 EIS, which may not always result in construction.

An EA purpose and need statement provides the details about the transportation-related needs and describes the "what and why" of the project. The purpose and need statement defines the criteria under which transportation alternatives are initially evaluated.

All build alternatives under consideration in the NEPA document should fully address the stated purpose and need. Any build alternative that does not adequately address the purpose and need can be eliminated from further consideration in the environmental document.

4 Development of Alternatives

This section describes the key concepts and process for identifying, analyzing, and screening alternatives and selecting a preferred alternative for an EA or EIS project, based on CEQ NEPA regulations (40 CFR 1500 to 1508), FHWA NEPA regulations (23 CFR 771), and CEQ and FHWA guidance. Once the purpose and need for a project has been identified and the study area has been defined, ADOT must identify alternative ways to solve the transportation problem. Under 40 CFR 1500.2, federal agencies are directed to:

> Use the NEPA process to identify and assess the reasonable alternatives to proposed actions that would avoid or minimize adverse effects of these actions upon the quality of the human environment.

In addition to CEQ requirements to evaluate alternatives to avoid, minimize, or mitigate adverse environmental impacts and FHWA regulations and guidance, other regulations require ADOT to consider “avoidance” alternatives. Specifically, Section 4(f), Executive Order 11990 on Wetlands, Executive Order 11988 on Floodplains, Executive Order 12898 on Environmental Justice, and the Clean Water Act Section 404(b)(1) guidelines require agencies to develop alternatives that would avoid or minimize impacts on specific natural and built environment resources and on environmental justice populations.

Identifying and evaluating alternatives to an ADOT project is a key NEPA process step that seeks to select transportation solutions that preserve and protect environmental and community resources.

4.1 General Guidance

CEQ regulations refer to “actions,” “action alternatives,” and the “no-action alternative.” ADOT and many other state departments of transportation refer to “build alternatives” and the “No-Build Alternative.” In discussions of regulatory requirements, this guidance uses the “action alternative” terminology. When describing ADOT practices, the term “build alternative” is used.

4.1.1 EIS Requirements

The evaluation of alternatives in an EIS compares the proposed action and the alternatives under consideration to define the issues and provide a clear basis for choosing among the options. CEQ calls the alternatives analysis chapter the “heart of the EIS,” (40 CFR 1502.14) and requires that agencies:

> (a) Rigorously explore and objectively evaluate all reasonable alternatives and, for alternatives eliminated from detailed study, briefly discuss the reasons for their elimination.
>
> (b) Devote substantial treatment to each alternative considered in detail, including the proposed action, so that reviewers may evaluate their comparative merits.
>
> (c) Include reasonable alternatives not within the jurisdiction of the lead agency.

(d) Include the alternative of no action.

(e) Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft EIS and identify such alternative in the final EIS unless another law prohibits the expression of such a preference.

(f) Include appropriate mitigation measures not already included in the proposed action or alternatives, including those aspects of the preferred alternative that were designed to be mitigation measures.

For the evaluation of "all reasonable alternatives," CEQ clarified this requirement by stating: "When there are potentially a very large number of alternatives, only a reasonable number of examples, covering the full spectrum of alternatives, must be analyzed and compared in the EIS. ... What constitutes a reasonable range of alternatives depends on the nature of the proposal and the facts in each case" (Forty Most Asked Questions Concerning CEQ's NEPA Regulations, March 16, 1981). In other words, not all possible alternatives need to be considered—rather, a reasonable range of alternatives are to be evaluated.

Alternatives may be determined to be unreasonable and be eliminated from detailed study through a screening process that considers factors such as the inability or limited ability to meet the proposed project's purpose and need, creation of significant adverse environmental impacts, undesirable design and engineering attributes, or unreasonable costs.

4.1.2 EA Requirements

The requirements for identifying, evaluating, screening, and selecting a preferred alternative for an EA are less rigorous. CEQ regulations state that an EA shall include a "brief discussion" of alternatives [40 CFR 1508.9(b)]. Consideration of the proposed action and a no-action alternative is often sufficient in an EA. Although not specified in FHWA Technical Advisory T 6640.8A, ADOT usually discusses any alternatives that were considered but dismissed from further consideration in an EA. This allows the public and agencies to understand the full scope of ADOT's decision-making process.

4.2 Alternatives Screening Process

The alternatives screening process involves reviewing a range of alternatives—sometimes a broad range, especially for an EIS—and selecting a more limited number of alternatives to be carried forward for detailed study in the NEPA document. For example, widening an existing road or improving an existing intersection is likely to have few alternatives, while building a new road in a new location may have numerous possible alignments that will be screened to produce a reasonable and representative range of alternatives.

Depending on the project's size and complexity, many potential alternatives may be identified, and may require several rounds of screening during the planning phase or early in the NEPA process. The screenings may include:

- initial alternatives screening prior to the NEPA process during the planning or Planning and Environmental Linkages phase

- conceptual alternatives screening early in the NEPA process
- final screening to identify the range of alternatives to be evaluated in the draft EIS

4.2.1 Preliminary Screening

During the early phases of project development, a set of preliminary alternatives may have been identified from earlier studies, including the long-range transportation plan and transportation planning studies. While developing the preliminary alternatives—and throughout the project planning process—some alternatives may be revised and modified, while others may be eliminated from further consideration because they do not meet the project's purpose and need, are determined to not be practicable, or involve substantial adverse impacts. New or modified alternatives may also come to light as the scoping process (which is mandatory for an EIS and optional for an EA) proceeds, based on factors that could include:

- review and input by agencies and the public as part of ADOT's public involvement program
- alternatives that provide a transportation solution at a lower cost and/or with fewer environmental impacts
- alternatives that reflect the full range of opportunities to meet the proposed project's purpose and need
- alternatives that include a combination of project elements, as opposed to single elements or concepts

Once a range of project alternatives has been identified by ADOT for further analysis, ADOT must determine that the alternatives meet the following criteria in accordance with 23 CFR 771.111(f):

- Connect logical termini and are of sufficient length to address environmental matters on a broad scope;
- Have independent utility or independent significance—that is, be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made; and
- Do not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

When developing a transportation project, ADOT must establish reasonable end points for the project, both for the improvement itself and for the scope of the environmental analysis. FHWA regulations require a project to have "logical termini," which are defined as rational end points for a transportation improvement. Similarly, alternatives are required to be of sufficient length to allow appropriate review of environmental impacts.

In developing a concept that can be advanced through planning, environmental review, design, and construction, ADOT must consider a "whole," or integrated, project or action. The action should satisfy an identified need, such as safety, rehabilitation, economic development, or capacity improvement (see Section 3, *Purpose and Need*). In addition, the project should be considered in the context of local socioeconomic conditions,

topography, future travel demand, and other infrastructure improvements. By not framing an action in this way, project sponsors may only marginally meet project needs or may cause unexpected side effects that require corrective action. ADOT must also be aware of the problem of segmentation. Segmentation may occur when a transportation need extends throughout an entire corridor, but environmental impacts and transportation needs are evaluated for only a segment of the corridor, leaving a substantial portion of the need unsolved. The 1993 FHWA memorandum, *The Development of Logical Project Termini,* provides additional guidance on the development of logical termini.

Therefore, for a transportation corridor where the improvements are related to one another that should be considered one project, several related construction projects may be combined and evaluated as one project. Construction can be programmed for shorter sections or finite construction elements as funding permits.

4.2.2 Alternatives Screening Criteria

The criteria used to screen alternatives should be specific, yet comprehensive enough to include the key factors that facilitate evaluating the validity and reasonableness of each build alternative. In addition to meeting the project's purpose and need, other criteria most frequently relevant to the alternatives screening process include:

- **Environmental impacts**: Impacts on environmental resources should be considered during screening and may support an early determination that an alternative is unreasonable. For example, an alternative could be screened out based on substantial impacts on floodplains or a Section 4(f) property that would be avoided by similar alternatives. Note, however, that impact estimates at the alternatives screening stage may have a higher degree of uncertainty because the alternatives are less well-defined and environmental field work may not have been completed to determine impacts to the degree, intensity, or amount needed to know whether the impacts could be avoided, minimized, or mitigated.
- **Technical factors**: Alternatives must be feasible and practicable from a number of technical factors that include design, engineering, drainage, safety, traffic operations, utilities, and long-term maintenance and operation. ADOT often considers these factors in an alternatives screening report that identifies, evaluates, and refines a reasonable range of alternatives and informs the EIS. For an EA, ADOT may prepare an alternatives selection report for larger or more complex projects where it has yet to be determined whether specific alternatives would result in significant adverse impacts. Alternatives may be dismissed on the basis of technical factors.
- **Financial feasibility**: Cost factors can be used in the screening of alternatives when costs substantially deviate from the programmed costs in the STIP or ADOT Five-year Transportation Facilities Construction Program, including consideration of construction and right-of-way costs, and the cost of business and residential relocations, as applicable.
- **Community and government support**: Support—or lack of support—for an ADOT project by affected local communities and governments, community organizations, stakeholders such as local businesses, public issue organizations, and the public at large can be used to screen alternatives. Adopted economic development plans; future land use, transportation, and recreation plans; public and stakeholder

acceptance of the project; the potential for public or local government controversy or opposition to the project; and agency concerns may be used to screen alternatives.

- **Section 4(f) and Section 404 considerations**: The screening of alternatives should take into account the requirements of Section 4(f) and Section 404, both of which include their own alternatives analysis requirements. While impacts on Section 4(f) and Section 404 resources may not be fully known during the screening process, it is often possible to identify potential impacts on those resources. ADOT seeks to ensure that the range of alternatives carried forward in the NEPA process will be sufficient to satisfy alternatives analyses required by Section 4(f) or Section 404. Coordination with potential Section 4(f) resource managers in the study area and USACE for Section 404 compliance at key milestones, including adoption of purpose and need and screening of alternatives, can help to ensure that the range of alternatives is adequate for compliance with these other laws (see the section, *Alternatives Analysis to Meet Other Federal Requirements*, for additional information).

The alternatives chapter of the EA or EIS for a large or complex project should summarize decisions made in the alternatives screening process and the reasons for those decisions. Typically, more detailed analysis, data, and documentation are included in a separate alternatives selection report, which should be referenced in the EA or EIS, as previously noted. Important issues to cover in this documentation include:

- description of each alternative addressed in the alternatives selection report
- overall methodology used for screening, including screening criteria
- data used in the screening process, including any important limitations of that data
- maps, graphics, tables, and other visual aids to make it easier understand the location of each alternative and the data used for its development
- agency and public input into the screening process
- rationale for eliminating an alternative from further consideration
- results of any additional screening-level analyses completed after the initial screening

4.3 Alternatives Analysis for an EIS

The alternatives screening process and procedures are the heart of an EIS (CEQ 1502.14) and are more specific and rigorous for an EIS than an EA, although similarities exist in the comparison, screening, preferred alternative identification, and use of the No-Build Alternative. The alternatives analysis chapter in an EIS must clearly indicate why a particular range of alternatives was developed, the process or methodology used, and public and agency input.

The alternatives analysis process for an EIS should follow a logical progression that includes:

- developing all reasonable alternatives for the proposed action
- comparing and screening alternatives to eliminate unreasonable alternatives

- obtaining agency and public input
- comparing alternatives to determine differences in impacts
- identifying the preferred alternative
- issuing a ROD selecting the preferred alternative for implementation

4.3.1 Range of Reasonable Alternatives to the Proposed Action

ADOT must identify and evaluate a range of reasonable alternatives, taking into consideration the need for safe and efficient transportation; social, economic, and environmental impacts of the proposed transportation improvements; and national, state, and local environmental protection goals (23 CFR 771.105). For an EIS, a reasonable range of alternatives could include:

- a variety of modes (even those that ADOT cannot pursue alone but could do so with a co-lead agency, as an example)
- a reasonable number of location alternatives (representative examples)
- avoidance alternatives [usually developed in accordance with other federal environmental regulations under the NEPA umbrella, such as Section 404, Section 4(f), Section 7, Section 106]

The advantages and disadvantages of each alternative are compared in the alternatives chapter of the EIS. The alternatives are assessed to determine how well they address the transportation issues identified in the purpose and need and what potential environmental impacts they entail.

The number of alternatives that constitutes a reasonable range is directly related to the purpose and need statement. A well-defined purpose and need section will assist in limiting the number of alternatives that will achieve the project goals and provide the basis for a legally defensible alternatives discussion. FHWA Technical Advisory T 6640.8A provides a detailed discussion of the factors that may be considered in determining what constitutes a reasonable range of build (or action) alternatives.

No-Build Alternative

The No-Build Alternative is one of the alternatives evaluated in an EIS. CEQ regulations (40 CFR 1502.14) require the consideration of the existing situation without the proposed action. It can include other programmed activities already in the STIP or TIP, other nearby projects that have been constructed or approved, or long-term operation and maintenance activities that would occur even if the proposed project is not approved.

The No-Build Alternative is fully assessed in the same manner as a build alternative and is used as a baseline for comparison against the impacts of all other alternatives. The No-Build Alternative cannot be removed from analysis because it does not meet the purpose and need. The EIS should thoroughly describe the need for the proposed project and what problems or deficiencies it seeks to solve, and discuss a future in which the improvements are not undertaken (including potential impacts that would result from taking no action).

The No-Build Alternative can be considered in two primary ways: (1) continue present management activities on an existing facility, but do not undertake or construct the build alternative or (2) do not undertake a project within a new corridor.

Alternatives Analysis and Comparison

After a range of reasonable alternatives has been identified, the alternatives together with the No-Build Alternative must be rigorously analyzed, evaluated, and compared objectively and individually. These alternatives should be presented in comparable detail, allowing the reader to evaluate their comparative merits or disadvantages. This does not dictate an amount of information to be provided for each alternative; rather, it prescribes a level of treatment that may, in turn, require varying amounts of information to enable a reader to evaluate and compare alternatives.

Each alternative should be described briefly using maps, comparative tables, plans, or other visual aids, along with a concise narrative in layman's terms. For large or lengthy projects, alternatives may be broken into segments or sections and described and evaluated geographically. At a minimum, the discussion of each alternative should include a clear, nontechnical description of the project concept, location, termini, costs, status of right-of-way needs, and any project features that clarify differences among alternatives. The alternatives chapter of the EIS should be devoted to describing and comparing the alternatives, with potential impacts discussion limited to a concise summary table in a comparative form. The detailed impact analysis is undertaken in the environmental consequences chapter of the EIS.

The alternatives analysis considers applicable laws and regulations in addition to NEPA—such as Section 404, Section 4(f), and Section 106 of the National Historic Preservation Act—in comparing alternatives and avoiding and minimizing impacts.

CEQ requires that alternatives that were considered in the planning process and subsequently rejected be briefly described and the reasons for their elimination discussed [40 CFR 1502.14(a)]. Alternatives suggested by cooperating and participating agencies or the public during scoping that were eliminated without detailed study should be adequately documented, including the reasons why they were eliminated. The EIS should include sufficient detail to ensure that NEPA requirements regarding alternatives have been met, with the alternatives selection report containing the detailed technical data and analysis.

FHWA, in its guidance for the implementation of Section 6002 of SAFETEA-LU (codified at 23 USC 139), explains that the development of a range of alternatives should be a collaborative process in which the lead agency or agencies must provide opportunities for the involvement of the public and participating agencies. The lead agency or agencies must consider the input provided by these groups. After considering their input, ADOT, under NEPA Assignment, is responsible for determining the range of alternatives to be considered in the NEPA document. The form and timing of the public and participating agency involvement is flexible, but the opportunity must be provided prior to ADOT's final decision regarding the reasonable range of alternatives. The provisions of 23 USC 139 are mandatory for an EIS and optional for an EA, depending on its size, complexity, environmental impact potential, potential for controversy, and related factors (the ADOT EP administrator would make this decision). See Section 8, *Process for Developing an*

EIS, for more information on the requirements of 23 USC 139 in involving participating agencies and the public in the development and screening of alternatives in the EIS.

Preferred Alternative

The "preferred alternative"—which is the proper term to use in an ADOT EIS—is the alternative which the agency believes would fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical, and other factors. The concept of the agency's preferred alternative is different from the "environmentally preferable alternative," although in some cases one alternative may be both (CEQ 40 Questions – 4a). It is generally the alternative that ADOT has determined would best fulfill its NEPA responsibilities while meeting the project purpose and need; minimizing impacts on the environment (natural, cultural, and socioeconomic); meeting ADOT design, engineering, and economic feasibility standards; and being supported by the public and resource agencies. In many cases, alternatives are adjusted throughout the NEPA process to minimize harm to the environment and communities. The preferred alternative is typically the alternative that has incorporated these changes and achieves the best balance among needs, impacts, design standards, costs, etc. The evaluation of alternatives should present the preferred alternative, and all of the alternatives in comparative form, to best define the issues and provide a clear basis for choosing among the options.

When a preferred alternative is clear based on the analyses developed during the alternatives evaluation process, ADOT discloses it in the draft EIS and at the associated public hearing. When the preferred alternative is not clear, the draft EIS should state that:

- A preferred alternative has not been identified at this point in the NEPA process,
- A range of reasonable alternatives is still under consideration, and
- The identification of a preferred alternative will be made during the preparation of the final EIS and ROD after public and agency review and comment on the draft EIS and the public hearing. This includes any additional alternatives that may require evaluation during the final EIS process.

This information should be discussed in the executive summary of the draft EIS, if applicable, and at the conclusion of the alternatives chapter.

If the preferred alternative is modified or is no longer the preferred alternative after the draft EIS review period, the final EIS must clearly identify the changes and potential impacts.

In the final EIS, ADOT must identify the preferred alternative and discuss the basis for its identification and all reasonable alternatives considered. It must also discuss substantive comments received on the draft EIS, provide responses, summarize public involvement, and describe the mitigation measures that are to be incorporated into the proposed action [23 CFR 771.125(a)(1)]. The discussion must provide relevant information and rationale for the identification.

The identification of a preferred alternative does not lessen ADOT's responsibility to give all alternatives a similar degree of analysis and evaluation during the EIS process. Once the preferred alternative has been identified, it may be developed to a higher level of

detail than other alternatives to facilitate development of mitigation measures and to ensure compliance with other laws and regulations if ADOT determines that doing so would not affect its ability to reach an impartial decision (23 USC 139).

The preferred alternative is also presented in the ROD as the "selected alternative," which is the alternative ADOT has selected to move forward with in the design, engineering, and eventual construction process. A monitoring and enforcement program shall be adopted and summarized where applicable for any mitigation (CEQ 1505.2).

If the preferred alternative from the final EIS is modified or is not the selected preferred alternative for some reason, the ROD must clearly address the changes. The ROD also must identify the "environmentally preferable alternative" in accordance with CEQ Section 1505.2(b). The environmentally preferable alternative can be different from the preferred alternative identified by ADOT in the EIS. The environmentally preferable alternative is the alternative that best promotes NEPA goals and objectives, which means it is the alternative that causes the least damage to the natural and physical environment and best protects, preserves, and enhances historic, cultural, and natural resources. If the environmentally preferable alternative is not the selected alternative, the ROD must explain why a different alternative was selected.

4.3.2 Additional EIS Alternative Considerations

Transportation System Management and Transportation Demand Management Alternatives

Transportation system management (TSM) alternatives may be used to encourage more efficient use of existing facilities through improved management and operation of vehicles on an existing roadway to reduce traffic congestion. Examples of TSM alternatives include:

- traffic operations, such as roadway widening, intersection expansion, additional turning lanes, and grade separation
- traffic signalization, such as improved timing, new signals, and additional signals at freeway on ramps
- efficient road space use for pedestrians and bicyclists, such as adding bicycle lanes, sidewalks, lighting, and overpasses
- special roadways, such as bus, high-occupancy vehicle, and contra-flow lanes (flex lanes)
- intermodal coordination, such as park-and-ride facilities
- parking management, such as preferential parking for carpools and vanpools

These limited-construction alternatives are generally relevant for major projects in densely developed urban areas. For rural areas, an alternative that considers reconstruction and rehabilitation of an existing facility or system should be included before selecting an alternative on a new alignment.

Transportation demand management (TDM) alternatives relate to various strategies that change travel behavior—such as how, when, and where people travel—and aim to

increase transportation system efficiency. Key TDM principles include incentives to change travel mode, time, or destination; improve the transportation options available to consumers; and reduce the need for physical travel through mobility substitutes and more efficient land use. TDM strategies are implemented to make transportation systems more efficient, safe, or convenient. TDM strategies focus on changing or reducing travel demand, particularly at peak commute hours, instead of increasing roadway capacity, to make more efficient use of the current roadway system.

Some TDM alternatives include:

- ride sharing
- commute trip reduction
- alternative work schedules
- vehicle restrictions
- telecommuting

FHWA Technical Advisory T 6640.8A guidance indicates that TSM or TDM alternatives should be considered, even though they may not be within the existing ADOT funding authority. Their evaluation and consideration may require coordination with entities outside of ADOT, such as metropolitan planning organizations, councils of government, regional transportation authorities, major employers, or major destinations (such as sports venues, ski areas, or other entertainment venues). Agreements must be secured with these entities before considering TSM or TDM alternatives to be viable.

Alternatives Analysis to Meet Other Federal Requirements

In addition to NEPA, other federal regulations and executive orders require consideration of “avoidance” alternatives. Specifically, Section 4(f), Executive Order 11990 on Wetlands, Executive Order 11988 on Floodplains, Executive Order 12898 on Environmental Justice, and the Clean Water Act Section 404(b)(1) guidelines require agencies to develop alternatives that would avoid or minimize impacts on specific natural and built environment resources and on environmental justice populations. For example, Section 4(f) generally requires that an alternative that “uses” a Section 4(f) property may not be selected unless there is no “prudent and feasible alternative” to that use and that the project has incorporated all possible planning to minimize harm [see the Section 4(f) discussion in Appendix A to this guidance for additional information]. Similarly, early and consistent coordination with USACE on projects that require an individual Section 404 permit is necessary so that the ADOT preferred alternative can be designated as the Section 404(b)(1) LEDPA. (For additional information, see Section 3.3, *Purpose and Need Statement for an EIS and EA*, and the *Alternatives* section of Appendix A, in the section, *Should Any Other Alternative Development Factors Be Considered?*)

4.4 Alternatives Analysis for an EA

The alternatives analysis, review, and identification of a preferred alternative in an EA is less rigorous and does not have to follow the mandatory process for an EIS.

4.4.1 Alternatives Analysis and Screening

An EA is not required to analyze a range of reasonable alternatives, as is required for an EIS. A build alternative and No-Build Alternative may be sufficient for an EA. A number of

build alternatives may, however, be analyzed and screened to arrive at the alternatives to be formally considered in the EA, depending on the project's size and complexity.

The alternatives analysis in the EA discusses the build alternatives that have been developed to meet the project's purpose and need, along with the No-Build Alternative. The process used to develop the alternatives is discussed, and a summary of public and agency input is included. A comparative table of alternatives and associated impacts should be presented in terms that can be easily understood by the public.

The EA should present a thorough description of the current transportation need and describe expected future operational, environmental, and socioeconomic conditions in which a build alternative is or is not implemented.

No-Build Alternative

Treatment of the No-Build Alternative is basically the same for an EA as for an EIS. See the discussion of the No-Build Alternative in Section 4.3, *Alternatives Analysis for an EIS*.

Alternatives Considered but Dismissed from Further Consideration

An EA is required to have only one build alternative in addition to the No-Build Alternative. During the alternatives evaluation process, however, other build alternatives may have been evaluated but dismissed from further consideration for a variety of reasons. The reasons for dismissing other alternatives considered should be briefly presented in the EA. ADOT maintains all of the data and information on the dismissed alternatives. ADOT may prepare an alternatives selection report that fully evaluates each alternative considered. The level of detail to present in the EA for alternatives considered but dismissed is decided by the ADOT study team.

Deciding which alternatives to dismiss from further evaluation may be simple and straightforward or, depending on the complexity of the project, may involve several levels of screening and analysis before the build alternatives can be narrowed to an individual alternative or set of alternatives for final evaluation in the EA. Each build alternative carried forward into the EA should be discussed at a comparable level, allowing the reader to evaluate and compare each alternative and its merits or disadvantages. This does not dictate an amount of information to be provided for each alternative; rather, it prescribes a level of treatment that may require varying amounts of information.

The alternatives chapter of the EA should be devoted to describing and comparing the alternatives, with impact discussion limited to a concise summary in a comparative form, such as a table. The environmental consequences chapter of the EA is the appropriate place to analyze the direct and indirect environmental, social, economic, and cultural impacts of the build alternative; redundancy between these sections should be avoided.

A key element of the alternatives evaluation process is providing specific, yet concise, information, reasoning, and criteria to support the rationale for identifying, evaluating, and eliminating build alternatives in the EA. If an alternative is eliminated because it does not meet the project's purpose and need, adequate explanatory data and information should be presented.

Alternatives recommended during the early coordination process by agencies, stakeholders, or the general public that are eliminated without detailed study should be adequately documented, and the reason why they were eliminated should be provided.

Preferred Alternative

The preferred alternative is generally the alternative that would best meet the project purpose and need; avoid, minimize, or mitigate impacts on the environment (natural, cultural, and socioeconomic); meet technical and cost requirements; and receive the greatest support among agencies and the public. For some projects, the preferred alternative may be obvious. Regardless, the level of analysis presented as the basis for the preferred alternative must be neutral and objective in regard to all alternatives—with effective predecisional public involvement findings incorporated—and cannot be slanted to support a preferred alternative over any other alternative.

In most cases, alternatives can be adjusted throughout the preliminary design and NEPA process to minimize harm to the environment and communities. When a preferred alternative is identified in the draft EA, it is acceptable to collect additional information relevant to the alternative to more fully develop it and better understand its impacts.

In some cases, one alternative may clearly be the best or only practicable alternative that can be implemented. If ADOT identifies the preferred alternative before agency and public review of the draft EA, the preferred alternative would be identified in the draft EA. In this case, the preferred alternative will be the basis for agency and public review and comment during the draft EA review period and the public meeting or hearing.

If ADOT determines that the identified preferred alternative would not result in significant direct or long-term adverse impacts, that preferred alternative is identified in the final EA, and a FONSI is prepared and approved by ADOT. Once ADOT provides environmental approval for the project, it can proceed to the next phase of design and engineering. If, however, the preferred alternative would result in significant adverse impacts that cannot be avoided, minimized, or mitigated, or is the subject of substantial controversy on environmental grounds, ADOT determines whether to (1) pursue the project as defined and prepare an EIS, (2) not pursue the project, which means selecting the No-Build Alternative, or (3) modify the preferred alternative to reduce adverse impacts to less-than-significant levels.

When the preferred alternative is not determined before the draft EA is made available for public and agency review and comment, the draft EA should state that ADOT will identify a preferred alternative in the final EA. If the preferred alternative is modified after the draft EA public review period, the final EA must clearly identify the changes and discuss the reasons why any new impacts are not of major concern, if applicable.

5 Public Involvement

Public input offers ADOT an opportunity to understand a community's values so it can better seek to avoid, minimize, or mitigate impacts from its decisions on transportation projects. Effective public involvement will also be conducted to ensure equal access of the public to the transportation decision-making process. This section summarizes ADOT's *Public Involvement Plan* (PIP) for transportation projects in Arizona under ADOT's management and oversight. The ADOT PIP was last updated in February 2017. It was prepared to meet federal requirements regarding public involvement and outreach for federally funded transportation projects and to undertake and facilitate projects for the benefit and betterment of Arizona communities. The PIP is a living document that provides guidelines, techniques, and examples used by ADOT to interact with the public throughout transportation planning, project design, construction, operation, and maintenance. The PIP demonstrates how ADOT will engage people of all races, cultures, and income levels, including minority and low-income populations in the transportation decision-making process.

This section also discusses the regulatory requirements for public involvement and the methodology developed by FHWA set forth in a number of statutes and regulations and adopted by ADOT as part of its NEPA Assignment responsibilities, policies, and procedures. The ADOT PIP is available on ADOT's website.[2]

ADOT's public involvement practices follow the fundamental premise that, in all of its programs, ADOT recognizes that it is vital to encourage meaningful public involvement. Openness to the public furthers ADOT's mission by increasing its credibility and improving agency decision-making (see Chapter 10 in the ADOT PIP).

The guidelines and procedures outlined in this section are implemented in the project-specific PIPs discussed in Chapter 4 of the ADOT PIP. The ADOT PIP also provides guidance and tools to comply with federal statutes and regulations pertaining to Title VI of the Civil Rights Act of 1964 (Title VI), Executive Order 12989 for environmental justice (EJ), Executive Order 13166 for limited English proficiency (LEP), Americans with Disabilities Act (ADA) of 1990, and NEPA. ADOT's willingness to remain open to new ideas from stakeholders, and to incorporate them, where appropriate, is essential to achieving ADOT's mission of providing a safe, efficient, cost-effective transportation system.

5.1 Requirements for Public Involvement

A number of federal statutes and regulations guide how public agencies undertake public involvement. The following list identifies and summarizes the statutes, regulations, and guidance that ADOT follows to undertake public involvement and community outreach and protection activities (see Chapter 1 of the ADOT PIP):

- **Transportation authorizing legislation**. Public involvement requirements have changed over the past 30 years as a result of transportation reauthorization legislation. The Acts involved are the Intermodal Surface Transportation Efficiency

[2] https://www.azdot.gov/planning/transportation-planning/public-involvement-plan

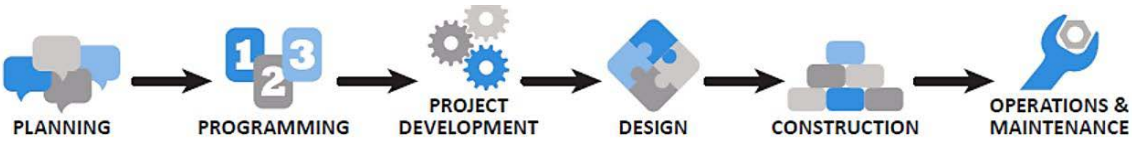
Act in 1991, Transportation Equity Act for the 21st Century in 1998, SAFETEA-LU in 2005, MAP-21 in 2012, and the Fixing America's Surface Transportation Act in 2016.

- **Title VI**. This statute provides that "no person shall on the grounds of race, color or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination" under any ADOT or ADOT-sponsored program or activity.
- **Americans with Disabilities Act**. The ADA stipulates that people with disabilities be offered the opportunity for involvement in developing and improving public services. In highway planning, collaboration with persons with disabilities is essential for developing access points beyond those that are required.
- **Environmental justice**. In 1994, Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, was issued. EJ considerations include "the fair treatment and meaningful involvement of all people, particularly minority, low-income and indigenous populations, in the environmental decision-making process."
- **Limited English proficiency**. ADOT's public involvement program strives to be innovative and proactive in engaging individuals from different cultures and backgrounds in the project development process. LEP is a term used to describe individuals who are not proficient in the English language. Title VI and Executive Order 13166 prohibit recipients of federal financial assistance from discrimination based on national origin.
- **FHWA NEPA regulations**. FHWA's NEPA requirements for public involvement are found at 23 CFR 771.111(h). Under NEPA Assignment, ADOT implements appropriate public involvement within the project NEPA process, consistent with FHWA regulations.
- **NEPA process**. The NEPA process requires environmental analysis of proposed actions prior to making decisions, including constructing highways and other publicly owned facilities with federal funding. As part of the ADOT NEPA Assignment, ADOT must follow the NEPA process for all federally funded projects. ADOT EP works closely with ADOT Communications to ensure NEPA compliance for meaningful public involvement when assessing the environmental effects of proposed actions.

5.2 Public Involvement Process

The transportation decision-making process shown in Figure 2 offers a general overview of how projects move from planning to construction. The following sections describe the transportation decision-making processes and the standards to be implemented to ensure ADOT or its partnering agencies implement transparent, meaningful public involvement (see Chapter 2 in the ADOT PIP).

Figure 2. Transportation decision-making process



5.2.1 Planning to Programming

The public participation process for statewide transportation planning and programming is authorized by MAP-21, the Fixing America's Surface Transportation Act, and FHWA's planning regulations at 23 CFR 450.210; the process is intended to complement and coordinate all planning efforts. According to 23 CFR 450.210, Arizona shall develop and use a documented public involvement process that shall be reviewed periodically for effectiveness to ensure full and open access is provided to all interested parties for the following transportation plans:

- **Long-Range Transportation Plan**. This plan looks 20 to 25 years into the future and identifies the state's transportation needs while estimating what resources will be available to meet those needs. This plan sets the overall strategic priorities that guide ADOT's future investments.
- **State Transportation Improvement Program**. The STIP identifies statewide priorities for transportation projects in Arizona. It is a compilation of projects using various federal funding programs and includes highway projects on city, county, and state highway systems. The STIP identifies and prioritizes projects over a 4-year period and is developed in cooperation with FHWA, the Federal Transit Administration, ADOT, Valley Metro, metropolitan planning organizations, councils of government, and other transportation providers in Arizona. The STIP is prepared by ADOT's Multimodal Planning Division and must be consistent with the Long-range Transportation Plan.
- **Five-year Transportation Facilities Construction Program**. ADOT's Five-year Transportation Facilities Construction Program is a list of projects scheduled for construction that is revised annually. It serves as a blueprint for future projects and designates how much local, state, and federal funding is allocated for those projects.

5.2.2 Project Development and Design

ADOT undertakes most of its public involvement activities during the project environmental review process. The study team, with the support of ADOT Communications, leads public involvement for specific projects. As appropriate, ADOT strives to engage agencies and the public early in the project development process so that projects may be shaped by community and agency feedback. The plan for public outreach activities is documented in a project-specific PIP. Key activities typically include the following, based on the type of NEPA document being prepared:

- formal public scoping meetings
- public information meetings

- agency and elected official meetings
- Tribal community meetings
- other stakeholder meetings (businesses, associations, community groups)
- alternatives review meetings and workshops
- project website, newsletters, displays, and meeting advertisements
- formal public review and comment period for NEPA documents
- formal public hearings
- transcript of the public hearings available for public review
- reasonable access to project information

5.2.3 Construction

During construction, the ADOT public involvement process generally transitions to providing information to the public: however, some level of public involvement may occur during construction. For example, ADOT might seek input about ways to minimize impacts of construction on those who live, work, or drive in the project area, or the methods by which those affected prefer to receive project information. Decisions about continuing some degree of public involvement during project construction are made on a case-by-case basis and depend on the size, scope, and potential impacts of each project. ADOT Communications provides the public with advance information about lane closures, median changes, business-access impacts, work hours and work zones, detours, milestones and ultimately completion of the project.

5.2.4 Operations and Maintenance

The operations and maintenance stage of the project can occur years after the construction phase has been completed. As with construction, public involvement during the operations and maintenance phase typically focuses on informing people about lane closures, work zones, detours, and potential temporary access impacts. Examples of operations activities include improvements to traffic signals, pavement markings, and signs. Example maintenance activities are roadside mowing/landscaping, pavement repairs, and drainage system upkeep.

5.2.5 Local Public Agency Projects

ADOT provides guidance to LPAs and development technical groups to ensure that public involvement goals and strategies align with ADOT’s expectations. LPAs work closely with ADOT EP and ADOT Communications and are encouraged to use ADOT’s PIP as a guide to implement public involvement and community outreach activities throughout the project development, design, construction, and operations and maintenance phases.

5.3 Project-specific Public Involvement Plans

A comprehensive and community-tailored, project-specific PIP is crucial to the success of any public involvement effort, regardless of whether it is a highway or transit project. The purpose of the project-specific PIP is to develop, implement, and document methods used to reach members of the public who may be affected by or who are interested in a proposed project. A project-specific PIP is typically used as a "roadmap" to guide public involvement at each stage of the transportation decision-making process. It will generally have three chapters: project development, design, and construction. The ultimate goal of each program is to incorporate as many members of the public into the decision-making process as possible, adjust to the community's needs, and solicit input throughout the life of a project. The project-specific PIP should also demonstrate how adjustments or accommodations were made to involve the public at each stage of the transportation-decision making process (see Chapter 3 and Appendix C of the ADOT PIP).

5.4 Public Involvement Roles and Responsibilities

Public involvement, depending on the complexity of the project, can require a large team of professionals. All project team members should be familiar with the guidance and practices stated in the ADOT PIP and especially with the federal requirements for Title VI, EJ, ADA, LEP, and NEPA, as applicable. For compliance purposes, group or individual training is provided by the designated ADOT Communications Civil Rights Office liaison with coordination from an ADOT Civil Rights Office representative, prior to any team member working on a project that may require public outreach. ADOT has identified the following participants as core team members: ADOT Communications, ADOT Multimodal Planning Division, ADOT EP, ADOT Project Management, ADOT Civil Rights Office, appropriate ADOT Districts, project-specific stakeholders (metropolitan planning organizations, councils of government, LPAs, tribes, and other federal, state, or local agencies and organizations), and professional consultants (see Chapter 4 and Appendix B of the ADOT PIP).

5.5 Public Involvement Tools and Techniques

5.5.1 Working with the Media

Utilizing multilingual media outlets is an effective way for ADOT to inform the public regarding transportation projects and to engage the public at key decision-making milestones. ADOT Communications serves as the lead for all media campaigns, contacts, and inquiries. All media engagement should be documented and activities summarized in the project-specific PIP. For large-scale projects, media kits can be disseminated through the Communications office. Despite the effectiveness of media relations in promoting ADOT projects, activities, or initiatives, it cannot replace on-the-ground community relations and public involvement efforts (see Chapter 5 of the ADOT PIP).

5.5.2 Social Media

Social media has become a cornerstone of effective communication in recent years. Social media is not a replacement for other forms of outreach, but it can help broaden

outreach, increase awareness and education, and provide engagement opportunities to members of the public who traditionally do not participate. Social media should not stand alone and does not supplement the need for customary outreach tools such as public meetings, workshops, local outreach, and hard-copy information materials such as fact sheets. Any formal comments collected through social media should be shared with the study team for consideration and inclusion in the project file.

5.5.3 Websites

Websites are an effective method of communication that provide a central, consistent source of information and updates about the project. Websites are also useful for keeping track of public interest through website traffic tracking and analysis tools. Websites must meet ADA accessibility requirements. ADOT often conducts surveys and polls through the project website at critical milestones to efficiently gauge public opinion of the decision-making process. While not a perfect tool, all ADOT web pages can translate content into dozens of languages using Google Translate.

5.5.4 Community Outreach

ADOT public involvement programs attempt to involve the largest possible segment of the population. Yet traditional methods such as public meetings and hearings might be attended by only a small group of people compared with the number who are interested or affected. To maximize public engagement, ADOT attends public events or identifies public places to disseminate information pertinent to the project, either by distributing fliers, setting up kiosks/booths to discuss details of the project, and other means of community outreach activities.

5.5.5 Additional Public Involvement Tools and Techniques

In addition to the public involvement tools and techniques discussed earlier, ADOT implements many tools and techniques from the widely accepted International Association for Public Participation public participation toolbox. The goal of the various public involvement tools is to maximize community engagement, especially for communities traditionally underserved. These materials should be concise and contain visuals when possible (see ADOT PIP Chapter 5, Section 5.5).

5.6 Stakeholder Assessment

Public involvement activities must be accessible to anyone who has an interest in the project, regardless of race, national origin, sex, age, income level, or disability. Making sure that all interested members of the public have the opportunity to provide input helps ADOT comply with federal nondiscrimination regulations discussed in this section. The more that is known about the study area population, the more effective the public involvement will be. ADOT conducts stakeholder assessments, as applicable, to comply with federal regulations and for projects that will be high impact and/or will affect densely populated areas, businesses, or commercial/industrial areas.

Stakeholder assessments are also a method to empower people by gaining their assistance in identifying engagement strategies that might be most effective in their communities. In-person stakeholder assessments are ideal; however, phone, email, or

survey methods may appeal to more people. If the area of proposed improvements encompasses a large region, a representative sample of the stakeholders should be consulted, especially in EJ areas, if applicable, or other groups that might be difficult to reach (see Chapter 6 and Appendix D of the ADOT PIP). Where tribes are involved, for example, it is good practice to hold tribe-specific meetings at a tribal location.

5.7 Public Information Meetings

Public meetings can take the form of advisory committees, workshops, focus groups, forums, open houses, and charrettes. The overall goal of any public meeting is to share information, continue dialogue, and obtain public input (see Chapter 7 of the ADOT PIP).

5.7.1 Public Meeting Planning

Before scheduling a public meeting, it is important to define objectives and determine the specific reason for conducting the meeting. What information does ADOT want to collect from the public or communicate to the public? To assist in designing the format for any public event, collaboration with the project team should first be conducted to determine the project goals and the desired outcome of the meeting. ADOT Communications uses the public meeting checklist (see Appendix E of the ADOT PIP).

To help the public gain a basic understanding of the NEPA process, include information on the following topics in any public meeting on an EA or EIS:

- What is NEPA?
- What is the purpose and need?
- What is the No-Build Alternative?

5.7.2 Meeting Format

The most conventional format for public meetings is a setup that allows the audience to review project information, typically through visual displays (for example, posters boards or roll plots), prior to a formal presentation and discussion with the project team both before and after the formal presentation. Public information meetings do not require a formal presentation; instead, information can be presented through display boards, a looping video, or a looping presentation, with project team staff available to answer questions and engage attendees. The selected meeting format should allow the public to provide comments and allow staff to adequately document comments received for reporting purposes.

5.7.3 Meeting Location and Room Layout

Public meeting locations should be convenient to attend and be within or near the study area. Ideal locations include schools, government facilities, community centers, libraries, and other neutral sites. The facility should comply with ADA requirements and be accessible to EJ communities. Community contacts obtained though the stakeholder assessment or community interviews (discussed in Chapter 6 of the ADOT PIP) can also provide insight into a neutral or accessible meeting location.

The meeting room should be arranged to accommodate the number of people expected and the display of elements according to the purpose of the meeting. Ideally, a room layout will be drafted before the meeting is set up. Additionally, the room should be ADA-compliant and outfitted to accommodate any LEP requests made prior to the meeting.

5.7.4 Public Meeting Time, Date, and Notification

Knowledge about the community is critical to determining the right date and time to host a meeting. For example, if the project study area includes a large population of retirees, it may be beneficial to hold the meetings during the morning or afternoon. Similarly, if the community or audience includes individuals with regular working hours (8 a.m. to 5 p.m.), holding meetings at night or on weekends may better fit their schedules. Data collected from stakeholder assessments and community interviews can also help to select the best meeting time. Most ADOT public meetings are held in the late afternoon or early evening to provide convenience for the most people.

With the audience in mind and input received from the stakeholder analysis and community interviews, the best methods for a meeting notification should be clear. For traditionally underserved communities, bringing information directly into their communities by delivering fliers will increase their awareness of public meetings. For communities where English is not the primary language, translation of meeting notifications will also improve awareness and attendance. Information regarding the meeting purpose, date, time, and place should be clearly conveyed to the intended participants in compliance with Title VI and NEPA requirements (see Appendices F and G in the ADOT PIP).

5.7.5 Public Meeting Staffing and Briefings

As previously mentioned, all project staff should be familiar with ADOT's PIP prior to any public outreach activity. When selecting staff for public information meetings, it is important to consider qualifications, roles, and personality. During every stage of planning a public involvement activity, it is important to keep all project team members updated. Briefing meetings should take place before attending a meeting with the public. These meetings will ensure that members of the project team are well-versed on the information being presented and able to answer questions anticipated from the public (see Appendix H in the ADOT PIP).

5.7.6 Public Meeting Documentation and Evaluation

When public meetings occur, it is critical that public feedback and input be captured. Providing opportunities to speak into a microphone should be carefully considered since some cultures may have oral traditions. In most cases, it is recommended to hand out question cards for people to write down questions, and for the moderator to read them aloud (see Appendix I in the ADOT PIP). To capture all input, it is important to assign note-takers at stations/displays to document input from the public through interaction with the project team. In addition, providing comment cards enables the project team to obtain input in a less formal manner. If appropriate, a court transcriber may be used to document all public comments.

It is also beneficial for the project team to “debrief” after the meeting. Each project team member should participate in the debriefing with comments captured by the public and provide his or her unique perspective on how to improve future meetings. A representative from ADOT Communications will prepare a written summary of the debriefing meeting and comments collected to be sent to the project team within 7 working days.

5.8 Public Hearings

ADOT may conduct public hearings for federally funded and non-federally funded projects. Public hearings are required for federally funded major transportation improvements, generally prior to a decision point. All EISs require public hearings. ADOT requires a public hearing or an opportunity for a public hearing for EAs (see Chapter 8 of the ADOT PIP). ADOT’s notifications for public meetings and hearings are similar, to comply with both NEPA and Title VI. ADOT provides notification of a public hearing by placing newspaper display advertisements at least 15 business days, but no more than 30 business days, before the hearing (see Appendix J in the ADOT PIP).

The primary difference between a public meeting and a public hearing is the flexibility that public meetings can offer versus the prescriptive nature and set standards of a public hearing. Public hearings have specific time frames associated with notice and advertising and comment due dates and also require an official transcription of comments that becomes part of the public record. Public hearings are, in most cases, held to comply with regulatory requirements, such as NEPA, and occur at pivotal points in the decision-making process. Public hearings are usually held during the public review period for a draft EIS or EA to obtain public input on a project. ADOT takes the public input into consideration during the preparation of the final EIS and ROD or the final EA and FONSI.

5.9 Public Involvement Documentation

Documentation of public involvement activities is critical to measure successes and demonstrate federal and state compliance for public involvement. Appropriate and complete documentation of public involvement activities, especially public feedback, involves not only ADOT Communications staff but the entire public involvement team (see Chapter 9 in the ADOT PIP). Public involvement documentation provides a history and record of commitments made as a result of the outreach activities throughout each stage of the transportation decision-making process. This documentation is used for environmental and Title VI documentation and is included as a chapter in the project-specific PIP. Members of the public should also have access to such documentation to confirm their input was heard or otherwise received and considered. Proper documentation includes compiling all materials related to the public involvement activity, summarizing and analyzing comments, and describing how the comments are being addressed.

5.9.1 Public Involvement Summary

The public involvement summary should contain all project components completed in their respective transportation planning stages and how and when each was presented

to the public, local agencies, elected officials, and other stakeholders. This summary should be a concluding chapter in a project-specific PIP at the appropriate stage of the transportation decision-making process (see Appendix K in the ADOT PIP).

5.9.2 Managing Public Comments

The public, in any one area or jurisdiction, may have diverse views and concerns regarding issues pertaining to their specific transportation needs. Conducting meaningful public involvement involves seeking public input at specific and key points in the transportation decision-making process. The most common way for the public to provide input is through verbal and written methods. It is not only critical to obtain public input but it is even more important to demonstrate to members of the public that their comments have been heard or otherwise received and truly influenced the decision or set of actions. To ensure public comments are included as part of the decision-making process and properly documented, a protocol is needed to collect, log, and respond to comments. These comments can be collected at any time during the decision-making process using a variety of tools and methods (see Appendices L and M in the ADOT PIP).

6 Quality Assurance/Quality Control, Legal Review, and Conflict Resolution

Achieving successful project delivery requires both QA and QC. ADOT EP defines QA as preventing problems, monitoring, and self-assessing for continual improvement. QC is defined as the project-level day-to-day effort of identifying and correcting problems. ADOT's QA/QC program seeks to maintain a high level of quality by means of attention to every stage of the EA/EIS delivery process.

6.1 Quality Assurance

The cornerstone of QA is expertise and communication. To ensure ADOT has highly qualified and knowledgeable staff, training and familiarization is required of all staff. ADOT has recommended training for staff members based on their function in EP. Staying up-to-date with the latest guidance, regulations, and other requirements is the responsibility of each staff member and his or her supervisor. The environmental training officer annually reviews the training database to verify staff have taken the recommended training. Additionally, ADOT relies on highly qualified and knowledge consultants to prepare EAs, EISs, and supporting environmental technical reports.

ADOT EP also has several processes that foster communication about important project information and ultimately lead to quality EAs or EISs. The main processes are listed below; however, each team member should be a proactive communicator regarding any project issues or changes—regardless of the project stage.

- early and frequent internal coordination between the environmental planner and technical specialists
- regular coordination with the EA or EIS consultant
- early and regular coordination with agencies, as appropriate to the scope of the project and issues
- early public involvement (scoping and meetings)
- internal ADOT EP project kick-off meeting, external project kickoff meetings, and progress meetings
- plans review (15, 30, 60, 95, and 100 percent) by the environmental planner and the environmental consultant

The results of coordination and meetings should be briefly documented for the project files, with an emphasis on any decisions that are made. Comment-response matrices for plans reviews should also be retained. For additional information on each of items listed above, refer to ADOT's *Environmental Planning Project Development Procedures Manual*.

6.2 Quality Control

6.2.1 ADOT Quality Control Principles

QC is an important element of the environmental review process. QC is intended to result in documents that are complete; meet ADOT standards; present factual, accurate, and consistent information; are reader-friendly; and meet FHWA and CEQ NEPA requirements. QC review is completed for the draft and final EAs and EISs, the decision document (FONSI or ROD), and technical reports and other supporting documents. QC review comments, comment responses, and resolutions are documented and placed in the project file to document the QC review.

EAs and EISs will receive varying degrees of QC as they move through the process; however, the focus of the review and documentation requirements is generally the same. ADOT's QC process focuses on the following:

- accuracy of content
- adequacy
- completeness
- compliance with CEQ and FHWA NEPA regulations regarding EISs (40 CFR 1508.9 and 23 CFR 771.123)
- compliance with ADOT standards and procedures
- compliance with ADOT's PIP
- conciseness
- consistency – both within the environmental document and between the environmental document and supporting technical reports
- errors and omissions
- readability
- compliance with FHWA nondiscrimination requirements for Title VI, LEP, and EJ

While all reviewers focus on these items during their review of the environmental documents or supporting technical reports, the NEPA Assignment manager is formally responsible for QC at ADOT, to ensure the documents and process comply with regulatory requirements and are technically rigorous.

6.2.2 Quality Control Review

At the beginning of the environmental process, the ADOT project delivery manager, in consultation with the NEPA assignment manager and the ADOT EP administrator, assigns the most appropriate environmental planner, based on experience and expertise, to lead an EA or EIS. This staff member is responsible for leading the environmental process and managing the quality of the EA or EIS and supporting technical documents. Assisting the environmental planner are the ADOT technical leads and the consultant.

The consultant's role in QA/QC is to abide by the QA/QC plan that it submits to ADOT at the beginning of a contract and to have all technical documents reviewed by appropriate subject-matter experts prior to submittal to ADOT. In addition to QC for accurate content, the consultant QC review also includes a thorough technical edit (spelling and grammar) and a review for readability, format, and structure. As part of the transmittal letter accompanying deliverables, the consultant should document who performed the QC.

ADOT technical specialists are responsible for managing the process associated with their specific technical areas, performing QC reviews of technical reports and other environmental products submitted by consultants, and ultimately approving those documents—signaling that the information in those products is accurate and ready for inclusion in an EA or EIS. Technical specialists also work with the environmental consultant to develop avoidance, minimization, and mitigation measures for resources in their areas of expertise. For specific QA/QC procedures for technical reports supporting EAs and EISs, consult ADOT's *Environmental Planning Quality Assurance/Quality Control Plan*.

As described in ADOT's *Environmental Planning Quality Assurance/Quality Control Plan*, all first draft EAs and EISs are submitted for review directly to the environmental planner leading the project, with a copy sent to the ADOT project manager. The environmental planner transmits the EA or EIS to the ADOT technical specialists assigned to the project for their review of sections of the EA or EIS that address their areas of expertise. Technical specialist QC review is undertaken to confirm that information presented in the approved technical report is accurately characterized in the EA or EIS. At the draft EA or draft EIS stage of the project, the ADOT project manager and the ADOT Civil Rights Office will review the environmental document. These reviews are concurrent, and the date by which the review should be completed and comments received is included in the transmittal.

At the completion of review, the environmental planner completes the EA or EIS Quality Control Checklist. The environmental planner transmits comments to the EA consultant and works with the document preparer to ensure all comments are properly addressed. A comment resolution meeting is held to ensure all comments will be adequately addressed. This resolution can take place by phone conference or an email confirmation if there are no issues that need discussion. The comments of all reviewers may be consolidated into a single document by the environmental planner. A PDF or hard copy of the EA or EIS is often used for this purpose.

The assigned environmental planner also fills out the ADOT EA or EIS Quality Control Form, which lists all reviewers, review dates, and comments—and saves it in the project file. This form "follows" the document through the entire QC process and, once complete, signifies that the environmental document been thoroughly checked and is ready for signature by the ADOT EP administrator.

Once all comments have been addressed and the EA/EIS is revised, the second version of the draft EA or draft EIS is submitted to the environmental planner for review. Technical specialists and other reviewers review the EA/EIS again only if their original comments were highly technical or difficult in nature, or if they requested a second review. Only two review submittals of the EA or EIS are expected. If outstanding issues

still need to be addressed in the second draft, it is good practice for the environmental planner and the environmental consultant to meet for issue resolution.

When all comments have been addressed, the environmental planner submits the draft EA or EIS to the NEPA Assignment manager for review and to the Arizona Attorney General's Office (AGO) and/or assigned outside environmental counsel for legal review, if appropriate (see Section 6.3). Once legal review has been completed and the draft EA or EIS is ready for public review, the NEPA Assignment manager recommends approval of the draft EA or EIS to the ADOT EP administrator, who signs the draft EA or EIS to denote approval for public review.

After the public review period for the draft EA or draft EIS and preparation of responses to comments, a QC review occurs to verify the accuracy and appropriateness of the responses to public and agency comments. If the draft EA or draft EIS is revised based on comments received, this new information also requires a QC. The environmental planner is responsible for these reviews; however, technical specialists may be consulted when issues are complex or require specialized knowledge.

The final EA or final EIS and the draft FONSI or draft ROD are the final documents requiring QC in the environmental process prior to each being approved by ADOT as final. The QC process is the same for these documents as for the draft EA and draft EIS.

6.3 Legal Review and Legal Sufficiency

Legal review is performed for each draft EIS, and is conducted for an EA at the discretion of the ADOT EP administrator. A legal sufficiency review is required for each final EIS [23 CFR 771.125(b)]. The AGO has a dedicated attorney for ADOT legal and legal sufficiency reviews.

Legal review of a draft EA and EIS occurs within 4 weeks (*ADOT Environmental Planning Project Development Procedures Manual, Appendix – Environmental Planning Review Timeframe Guidelines)*. Final EISs and RODs always receive a 4-week AGO legal sufficiency review.

6.4 Conflict Resolution

Occasionally during the environmental process, conflict regarding a specific environmental issue or disagreement on comments or how comments should be resolved arises. When this occurs, it is ADOT EP's practice that open and timely discussion be initiated and that internal experts be engaged to formulate potential solutions. If an issue cannot be resolved at the lowest level, then the issue should be escalated to an immediate supervisor within 5 working days or less. If still unresolved, the issue should be escalated to the next level supervisor on both sides of a disagreement and, if necessary, to the environmental administrator.

Sometimes a conflict arises with outside agencies, stakeholders, or ADOT District staff. The escalation process described above applies. For conflict resolution between agencies, refer to the following guidance:

- FHWA Environmental Review Toolkit: Conflict Resolution[3]
- FHWA Environmental Review Toolkit: Collaborative Problem Solving[4]

6.5 QA/QC Monitoring and Continual Improvement

ADOT strives for continuous improvement; therefore, staff members' performance regarding document quality and delivery are assessed on an ongoing basis by their supervisors in conformance with ADOT policies and the requirements outlined in the NEPA Assignment MOU (23 USC 327). ADOT has instituted several performance measures to perform self-assessment and make adjustments where necessary to ensure that it complies with the NEPA Assignment MOU.

[3] https://www.environment.fhwa.dot.gov/Pubs_resources_tools/resources/conflict_res.aspx

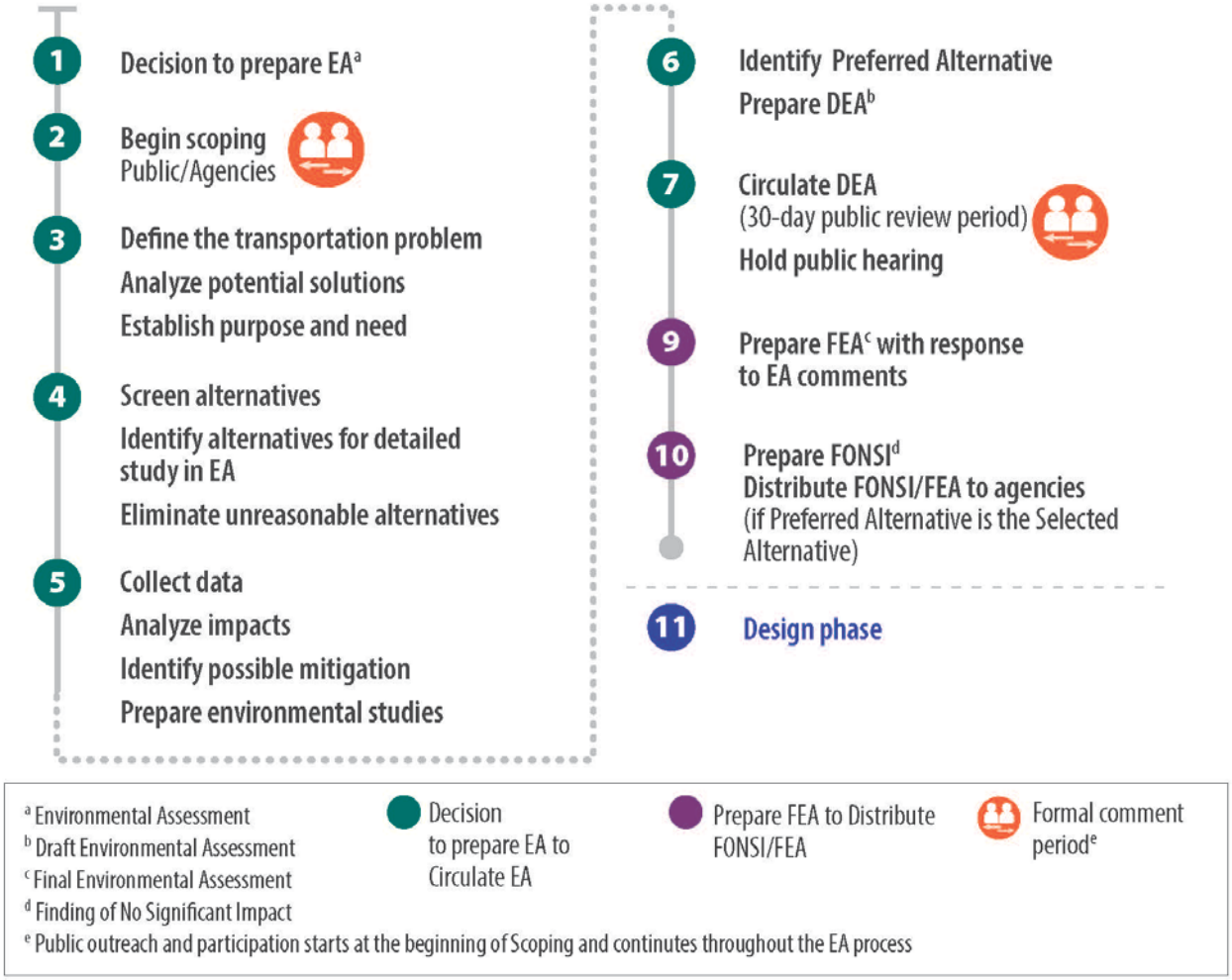
[4] https://www.environment.fhwa.dot.gov/pubs_resources_tools/resources/adrguide/adrappb.aspx

7 Process for Developing an EA

This section describes the process for initiating and completing an EA in accordance with NEPA, CEQ NEPA regulations, and FHWA NEPA regulations. An EA is one of the three classes of action identified by FHWA. According to FHWA regulations, EAs are “actions in which the significance of the environmental impact is not clearly established” [23 CFR 771.115(c)]. As a practical matter, ADOT prepares an EA for projects that are not likely to have significant impacts on the environment and that do not meet the criteria for a CE. The EA provides the analysis that ADOT needs to assess the environmental impacts of its proposed action or project. If the EA identifies that the proposed project would result in no significant environmental impacts, then a FONSI is prepared. If, during the preparation of the EA, ADOT EP determines that the proposed action would result in significant environmental impacts, the level of NEPA documentation would be reassessed and an EIS would be prepared, if required.

An EA is prepared by following the procedures outlined in this section. Figure 3 shows the steps undertaken to prepare an EA.

Figure 3. EA preparation process



7.1 Initiating Environmental Activities

At the initiation of a project, a project manager from the ADOT Multimodal Planning Division or Project Management Group will forward a request to the ADOT EP project delivery manager, who assigns the project to an environmental planner and asks the technical area team leads to assign staff to the project. The environmental planner coordinates with the ADOT project manager to assist in contracting an environmental consultant to prepare the EA. It is ADOT's practice for EAs to be prepared by a consultant.

The ADOT-assigned environmental planner leads the project environmental process and coordination effort. The assigned environmental planner is the environmental point of contact for the project and is responsible for coordinating with the ADOT project manager and environmental technical specialists assigned to the project. The environmental planner is also responsible for managing the project's environmental deliverables, which are developed in compliance with NEPA and other federal environmental requirements.

The environmental planner takes several steps to initiate project environmental activities prior to developing the EA itself. The study area is defined, the class of action is verified, and scoping and public involvement activities are initiated, as appropriate.

7.1.1 Defining the Study Area

Once a project has been identified, the project study area is clearly defined. The study area is selected based on the project's logical termini and should encompass an area that will accommodate all anticipated alternatives. It is good practice to define the study area generously to accommodate potential adjustments to the project and to avoid the need for supplemental analyses.

7.1.2 Verifying the Class of Action

Consistent with CEQ regulations, FHWA identifies three classes of actions in its NEPA regulations (23 CFR 771.115):

(a) *Class I (EISs)*. Actions that significantly affect the environment require an EIS (40 CFR 1508.27).

(b) *Class II (CEs)*. Actions that do not individually or cumulatively have a significant environmental effect are excluded from the requirement to prepare an EA or EIS. A specific list of FHWA federal-aid highway project CEs normally not requiring NEPA documentation is set forth in 23 CFR 771.117(c). When appropriately documented, additional federal-aid highway projects may also qualify as CEs pursuant to 23 CFR 771.117(d).

(c) *Class III (EAs)*. Actions in which the significance of the environmental impact is not clearly established require an EA. All actions that are not Class I or II are Class III.

See Section 2, *When to Prepare an EA or an EIS*, for additional information regarding the class of action.

At the initiation of project environmental activities, the environmental planner reviews the preliminary class of action identified during early planning to verify that the class of action is appropriate. Verification may include considering probable environmental impacts (given the project setting) and typical activities the project would involve, and coordination with technical specialists regarding the environmental issues likely to be involved. For an EA, the environmental planner should give particular consideration to the potential for significant impacts.

7.1.3 Initiating Scoping and Public Involvement

CEQ regulations do not identify specific scoping requirements for an EA; however, ADOT typically conducts early coordination for EA projects with federal and state agencies and local governments and holds a public scoping meeting. Tribal coordination and consultation occur within a separate, dedicated process based on government-to-government requirements. Early agency coordination can assist in refining the study area, project purpose and need, and alternatives. It is also an opportunity to gather information on environmental resources and receive input from resource agencies regarding study expectations and potential mitigation requirements. Project information should be provided to agencies in advance of any early coordination meetings and may include a project description, preliminary purpose and need, project location map, and study area map. Information gathered at these meetings is documented and included in the project file.

If a cooperating agency or agencies have been identified, they should be invited at this stage in the project. Letters should be sent inviting them to participate in the EA development. This is also the stage in the project when letters should be sent to initiate tribal consultation, if needed. Copies of these letters are included in the EA, along with responses received and documentation of meetings held with the agencies or tribes. The public should also be notified of the project at this time.

Following early agency coordination meetings, a public scoping meeting is generally held. 40 CFR 1506.6 and 23 CFR 771.105(c) require that practitioners “make diligent efforts to involve the public” in the NEPA process, which includes involving minority and low-income populations. To reach minority and/or low-income populations, ADOT may have to use strategic outreach methods, such as holding neighborhood meetings, conducting one-on-one interviews at a community center, or interviewing community leaders from faith-based and social service organizations. ADOT will also comply with Title VI and LEP federal requirements for Public Involvement as per ADOT’s PIP.

All scoping comments received from agencies, tribes, and the public are considered in further development of the project. ADOT gives careful consideration to input received in determining how to best advance the EA. ADOT responds to all scoping comments received and prepares a scoping summary report. The summary report is consulted during development of the EA and is included in the project file. A summary of scoping activities is also included in the EA.

7.2 Developing the Draft EA

The EA should be a clear and concise document. It describes the existing natural, physical, and social environment and describes the potential direct, indirect, and

cumulative effects of the project on the environment. The EA compares impacts that are anticipated to result from the project alternatives under consideration, including the no-build alternative and one or more build alternatives. The EA focuses on environmental resources that may be affected by the project—particularly resources for which the significance of the impacts is in question—and resources of concern identified through the scoping process. Resources with only minimal impacts should be briefly addressed. Environmental resource categories that will not be affected by the project should be acknowledged, but not further evaluated.

The target audience for the EA is the general public, public officials, and regulatory agencies. Clear, plain language should be used to convey information and analyses. Detailed or lengthy descriptions of the information gathered and documented in technical reports should not be included in the EA. Instead, technical reports should be summarized in the EA using terminology easily understood by the general public and should be made available for public review upon request. Tables, figures, and photographs or other graphics should be used to minimize the amount of documentation and to assist readers with their review and understanding of the project. All technical studies and other materials used to develop the EA are kept in the project file.

A preferred alternative may be identified in the draft EA that is made available for public review and should be identified at that time if ADOT has identified a preferred alternative. In cases where there is no clear preferred alternative at the draft EA stage, the preferred alternative is identified in the final EA.

The environmental team should have a solid understanding of project effects on environmental resources and anticipated agency outcomes. Agency consultations do not need to be complete when the draft EA is made available for public review. The status of agency consultation and the steps necessary to complete consultation should be described in the draft EA.

FHWA's Technical Advisory T6640.8A, *Guidance for Preparing and Processing Environmental and Section 4(f) Documents*, suggests that the following information be included in the EA:

- **Cover Sheet**: The cover sheet presents the project name and project limits and identifies the NEPA lead agency and any cooperating agencies. The deadline for comments and the location where comments should be sent are also included. ADOT's EA approval signature is placed on the cover sheet.

  For NEPA Assignment projects, the following statement is required to appear on the cover page of the EA:

  The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by ADOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated April 16, 2019, and executed by FHWA and ADOT.

- **Purpose of and Need for Action**: The transportation need that the proposed action or project is intended to satisfy is the focus of the purpose and need section of the EA. This section also typically describes the proposed project, its length and termini, and important background information.

- **Alternatives**: Alternatives under consideration are presented in this section, including the no-build alternative and one or more build alternatives. The no-build alternative serves as a baseline for comparison with the build alternatives under consideration. Alternatives that were initially considered but eliminated from further consideration are also briefly described.
- **Impacts**: The impacts section of the EA describes the social and natural environmental impacts that would likely result from each alternative under consideration. Direct, indirect, and cumulative impacts are considered, as are both temporary (construction) and permanent impacts. Information presented should be sufficient to analyze each impact and to identify appropriate mitigation measures. For resources under the jurisdiction of resource agencies or tribes, the discussion should include the results of any completed or ongoing consultations, as applicable.
- **Comments and Coordination**: Early and ongoing coordination activities with agencies and the public are discussed in this section, along with key issues of concern agencies or the public may have. In the final EA, agency and public comments and ADOT responses to those comments are included, typically as an appendix.
- **Section 4(f) Evaluation**: If the project will use a Section 4(f) property, or if properties protected by Section 4(f) are in the vicinity of the project, a Section 4(f) evaluation or documentation that Section 4(f) properties were considered is prepared; it is placed in a separate section of the EA. Note that while there may be potential Section 4(f) properties in the vicinity of the project, a formal Section 4(f) evaluation is prepared only when there is a use of a Section 4(f) property.

ADOT has established an outline that should be followed for all EAs. See Appendix A, *Contents of an EA and EIS,* for information on EA contents.

7.3 Review and Approval of the Draft EA

ADOT requires the subject matter experts and the document manager of the consultant preparing the EA and supporting technical documents to conduct a technical QA/QC review of all documents prior to their submittal to ADOT, in accordance with the QA/QC plan that the consultant is required to submit to ADOT (see Section 6.2, *Quality Control*). Consultant QC review includes a thorough technical edit (spelling and grammar) and a review for format, structure, and accurate content. A transmittal letter documenting who completed the QC review accompanies the submittal.

ADOT technical specialists assigned to the project are responsible for reviewing technical reports prepared in support of the EA. Technical specialists also work with the EA consultant to develop avoidance, minimization, and mitigation measures for resources in their areas of expertise.

See Section 6.2, *Quality Control,* and ADOT's *Environmental Planning Quality Assurance/Quality Control Plan* for additional information on QC review for the EA.

When all comments have been addressed and the draft EA is ready for public review, the NEPA Assignment manager recommends approval of the draft EA to the ADOT EP administrator, who signs the draft EA to denote approval for public review.

7.4 Public Review of the Draft EA

Once the draft EA is approved by the ADOT EP administrator, ADOT makes the draft EA available for public review. To announce the availability of the draft EA for review, ADOT places a notice that briefly describes the project and its impacts in a news release, using multilingual outlets in accordance with FHWA's LEP requirements and EJ tools to engage the public. The notice states that the EA can be reviewed on the ADOT website, invites comments from all interested parties, describes where and how comments are to be submitted, and identifies the date by which comments are to be submitted. This notice is also sent to affected federal, state, and local agencies.

In addition to NEPA, other environmental regulations require public review. If the project would have impacts on floodplains, wetlands, or historic properties, or *de minimis* impacts on Section 4(f) properties, the EA availability notice is to provide this information to satisfy the public review requirements of these other regulations.

FHWA's NEPA regulations [23 CFR 771.119(e)] require the draft EA to be available for public review and comment for 30 days unless ADOT (under NEPA Assignment) determines for good cause that a different review period is warranted.

7.5 Public Hearing

FHWA regulations require one or more public hearings or the opportunity for hearings for any federal-aid project that meets one or more of the following criteria [23 CFR 771.111(h)(2)(iii)]:

- requires significant amounts of right-of-way
- substantially changes the layout or functions of connecting roadways or of the facility being improved
- has a substantial adverse impact on abutting property
- otherwise has a significant social, economic, environmental, or other effect
- is such that FHWA (ADOT, under NEPA Assignment) determines that a public hearing is in the public interest

While many EAs do not require a public hearing by regulation, it is ADOT's practice to hold a public hearing for most EAs. The determination to hold a public hearing is made on a project-by-project basis by ADOT EP in cooperation with ADOT Communications, ADOT Civil Rights Office, and the ADOT project manager. When a public hearing is held, the EA must be publicly available for a minimum of 15 days before the hearing and be available for review at the public hearing. When a public hearing is held, information regarding its date, time, and location is included in the EA public notice.

See Section 5, *Public Involvement*, and the ADOT PIP for additional information on the public hearing.

7.6 Developing the Final EA

At the conclusion of the EA public review period, ADOT reviews all comments received and considers them in developing the final EA. ADOT evaluates the comments received

to determine whether changes to the EA analysis, conclusions, or the project itself are warranted. Responses are provided for all substantive comments. Comments and responses become an attachment to the final EA.

The EA is revised based on public input, agency consultation, and any updated project information and becomes the final EA. If no preferred alternative was identified in the draft EA, the preferred alternative is identified in the final EA. Agency input and public comments are considered in identifying the preferred alternative. If only one build alternative and the no-build alternative were analyzed in the draft EA, ADOT's decision is whether to move forward with the proposed project. If more than one build alternative was evaluated in the draft EA, the final EA identifies the preferred alternative from among the build alternatives evaluated. If no significant impacts are identified in the EA, the preferred alternative formally becomes the selected alternative in the FONSI.

ADOT may prepare the final EA in one of two formats:

1. An errata sheet or sheets describing changes in the proposed project or its circumstances, impacts, or mitigation measures may be attached to the draft EA. The errata format is ADOT's preferred option for the final EA. It is most appropriate in situations where only minor changes are necessary to revise the draft EA after public review. The "preferred alternative" becomes the "selected alternative" upon approval of the FONSI and no text change is required in the EA errata to modify the EA.
2. The draft EA may be revised into the final EA to reflect project changes, impacts, or mitigation, or to update consultation and coordination or other information regarding the project. This format is used when more extensive changes are required between the draft and final EA. The "preferred alternative" becomes the "selected alternative" upon approval of the FONSI.

The following statement must appear on the cover page of the final EA:

> *The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by ADOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated April 16, 2019, and executed by FHWA and ADOT.*

7.7 Review and Approval of the Final EA

Review of the final EA occurs in the same manner as draft EA review, as described above. Once all comments have been addressed, the environmental planner fills out the EA Quality Control Form and submits it along with the final EA to the NEPA Assignment manager. If the final EA meets requirements, the NEPA Assignment manager recommends approval of the final EA to the ADOT EP administrator, who signs the final EA to denote final approval.

When the final EA has been approved by ADOT EP, the environmental planner will notify the public of the availability of the final EA on the ADOT EP website and send an email notification to involved agencies. The public hearing transcript, public comments and ADOT responses, and a public hearing summary report are placed in the project file.

7.8 Project Decision

After the public hearing has been held, the comment period has closed, and comments have been addressed, ADOT makes a formal determination regarding whether the impacts evaluated in the EA are significant, including whether mitigation measures can be used to avoid, minimize, or reduce adverse impacts to levels that are not significant (CEQ 2011). If ADOT determines—on the basis of the evaluation of impacts and public and agency review and input—that the proposed action would not result in significant impacts, a FONSI is prepared. The EA documents the environmental assessment, evaluation, and recommended action and resolves the question of significance. The FONSI documents the decision for the project. It discusses the environmental issues and reaches appropriate decisions regarding mitigation and other commitments.

If ADOT concludes that the action would have significant impacts on the environment, ADOT could reconsider whether changes to the project design, location, or other elements would avoid, minimize, or mitigate project impacts below the level of significance. Alternatively, the ADOT EP administrator may recommend that an EIS be prepared. The EA would be used to facilitate the preparation of the EIS.

7.8.1 Finding of No Significant Impact

The FONSI is both the determination that the project has no significant impacts on the environment and the documentation of that decision. The FONSI is prepared only when ADOT determines that the project will not have a significant impact on the environment. If significant impacts are determined, a draft EIS is prepared or the project is revised to eliminate significant impacts.

The FONSI is prepared by the EA consultant. The FONSI includes a statement selecting the preferred alternative that was identified in the EA and presents the determination that the project would have no significant impacts on the environment. The FONSI also documents all environmental commitments and mitigation measures and summarizes compliance with NEPA and other federal environmental requirements. The FONSI may be a very brief statement that incorporates the final EA and other environmental documentation by reference.

The following statement is the core of the FONSI:

> ADOT has determined that this project will not have any significant impact on the human or natural environment. This finding of no significant impact is based on the attached environmental assessment, which has been independently evaluated by ADOT and determined to adequately discuss the environmental issues and impacts of the proposed project. The environmental assessment provides sufficient evidence and analysis for ADOT to determine that an environmental impact statement is not required. ADOT takes full responsibility for the accuracy, scope, and content of the attached environmental assessment.

The following statement must appear on the FONSI:

> *The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Arizona Department of Transportation pursuant to 23 United States Code 327 and a Memorandum of Understanding dated April 16, 2019, and executed by the Federal Highway Administration and Arizona Department of Transportation.*

The FONSI is reviewed and approved in the same manner as the final EA; review and approval of the two documents may occur simultaneously. The FONSI is signed by the ADOT EP administrator to denote approval.

According to FHWA Technical Advisory T6640.8A, formal distribution of the FONSI is not required; however, a notice of availability should be sent to involved federal, state, and local government agencies, and the FONSI should be made available to the public upon request [23 CFR 771.121(b)].

The final EA and FONSI are made available at ADOT and on the ADOT EP Approved Environmental Documents web page.

7.9 Notice of Statute of Limitations

The statute of limitations on legal claims against a project FONSI and other related transportation project actions, such as a Section 404 permit, can be limited to 150 days provided specific conditions are met. The 150-day statute of limitations was established in 23 USC 139(l). The FONSI or other final agency action must be related to a transportation project, and a Limitation of Claims Notice must be placed in the *Federal Register* for the 150-day statute of limitations to apply. ADOT prepares the statute of limitations notice for FHWA to place in the *Federal Register* (only federal agencies may publish in the *Federal Register,* even under NEPA Assignment).

Publication in the *Federal Register* starts the clock for the statute of limitations. The *Federal Register* Limitation of Claims Notice is separate from the notice of availability and is often prepared later in the process.

Under 23 CFR 771.139, ADOT can issue a limitation on claims notice in the *Federal Register* that reduces the statute of limitations for challenging a federal agency decision for a project from 6 years to 150 days. ADOT will activate the 150-day statute of limitations for those projects deemed necessary. The NEPA Assignment manager is responsible for coordinating the placement of the notice in the *Federal Register* with FHWA's Arizona Division.

7.10 Coordinating Other Environmental Reviews with NEPA

This section describes the need to coordinate and sequence the NEPA EA preparation and review process with the requirements of other environmental laws and regulations for review, comment, coordination, and consultation. The primary discussion of this topic is in Section 8, *Process for Developing an EIS*, under Section 8.14, *Coordinating Other Environmental Reviews with NEPA*, to avoid duplication.

This section provides an abbreviated version of the requirements to coordinate and sequence the NEPA EA review process with other environmental laws and regulations, including Clean Water Act Section 404 permitting, Endangered Species Act Section 7 compliance, National Historic Preservation Act Section 106 consultation, and Department of Transportation Act Section 4(f) compliance.

Table 2 illustrates the NEPA EA environmental review and coordination milestones for each law. The stages of the EA are shown, along with the activities, submittals, findings, and decisions that would typically occur for each stage. These stages can serve as “checkpoints” to ensure that environmental reviews for each law and/or regulation are being sequenced or synchronized properly with the NEPA process, along with providing a mechanism to direct or redirect actions or activities accordingly.

Table 2. NEPA EA and other environmental review and coordination milestones

National Environmental Policy Act	Clean Water Act Section 404	Endangered Species Act Section 7	National Historic Preservation Act Section 106	Department of Transportation Act Section 4(f)
Develop project plan and schedule				
Develop proposed action and conduct scoping (ADOT; ongoing process)	Conduct preapplication consultation (USACE; ongoing process)	Seek federal, tribal, and state agency technical assistance/ preliminary species list (ongoing process)	Review ADOT 2015 Programmatic Agreement/ preliminary cultural resources list (ongoing process)	Create preliminary Section 4(f) resources list to include parks, recreation areas, wildlife and waterfowl refuges, and historic properties (ADOT; ongoing process)
Conduct early coordination (purpose and need, scoping, alternatives, potential impacts)				
Evaluate and integrate applicable scoping comments (ADOT; ongoing process)	Submit jurisdictional delineation form and attachments (ADOT; action) Make jurisdictional determination (USACE; action) Prepare/submit application (ADOT; action)	Seek “may be present”/”may affect” determination for species/critical habitat Conduct U.S. Fish and Wildlife Service (USFWS) consultation (ongoing process) Submit biological evaluation with “not likely to affect” (ADOT; action) and conduct USFWS consultation (ongoing process)	Determine area of potential effects, engage consulting parties, evaluate National Register of Historic Places eligibility, make determination of effect, seek consulting party review, and conduct public involvement (ongoing process)	Identify/evaluate Section 4(f) applicable properties (ADOT; ongoing process) Conduct public use coordination with resource officials (ADOT; ongoing process), considering the following: “Use” qualifies as *de minimis* determination (ADOT; action) “Use” qualifies as programmatic evaluation (ADOT; action) “Use” requires individual Section 4(f) evaluation (ADOT; action)

Table 2. NEPA EA and other environmental review and coordination milestones

National Environmental Policy Act	Clean Water Act Section 404	Endangered Species Act Section 7	National Historic Preservation Act Section 106	Department of Transportation Act Section 4(f)
Publish EA notice of availability/USACE Section 404 permit public notice				
Address comments (ADOT; ongoing process) Issue FONSI or declare need to prepare an EIS (ADOT; action)	Address USACE comments (ADOT; action) Seek USACE draft permit decision (USACE; action)	Submit biological evaluation with "likely to affect" (ADOT; action) and conduct formal USFWS consultation (ongoing process) Submit revised biological evaluation (ADOT; action) and conduct USFWS consultation (ongoing process) Seek USFWS concurrence letter or biological opinion with jeopardy and/or destruction or adverse modification with reasonable and prudent avoidance alternatives (USFWS; action)	Conduct determination of effect review, determine resolution of adverse effect (State Historic Preservation Office; action)	Conduct additional public use coordination with resource officials (ADOT; ongoing process) Identify/evaluate feasible/ prudent avoidance/least harm alternatives (ADOT; action) Prepare draft Section 4(f) evaluation (ADOT; action) Seek resource officials' (and federal agencies, if applicable) review and comment, ensure ADOT response and revision (officials and ADOT; action) Conduct follow-up resource official coordination/legal sufficiency review/FHWA approval (ADOT; action, and FHWA; action)
Issue FONSI, if applicable				
Prepare final EA with FONSI (ADOT; action) or prepare EIS (ADOT; action)	USACE issues permit – Nationwide General Permit, Regional General Permit, or individual permit (USACE; action) Conduct USACE NEPA process for individual permit (USACE; action) in accordance with One Federal Decision regulations	Present FONSI/Section 7 mitigation measures (ADOT; action) or avoidance alternative (USFWS; action)	Present FONSI/programmatic agreement standard measures, or project-specific memorandum of agreement or programmatic agreement (ADOT; action), or Advisory Council on Historic Preservation comment	Present FONSI/project-specific mitigation measures or Section 4(f) least-harm alternative (ADOT; action) – other than constructive use decision in accordance with 327 MOU, Section 3.2.8 (FHWA; action)

8 Process for Developing an EIS

This section describes the process for initiating and completing an EIS and ROD in accordance with NEPA and related NEPA regulations from CEQ and FHWA. An EIS is prepared for an action that is likely to have significant impacts on the environment. An EIS is one of the three COAs identified by FHWA. According to FHWA regulations, EISs are prepared for "actions that significantly affect the quality of the human environment" [23 CFR 771.115(a), 40 CFR 1508.27]. The EIS presents the evaluation of project alternatives and their potential impacts on the human and natural environment to support ADOT's decision regarding which alternative to approve. A ROD is prepared at the conclusion of the EIS process to document ADOT's decision and the basis for that decision.

An EIS is meant to "serve as an action-forcing device to ensure that the policies and goals defined in ... NEPA are infused into the ongoing programs and actions of the Federal Government." An EIS "is more than a disclosure document. It shall be used by Federal officials in conjunction with other relevant material to plan actions and make decisions" (CEQ, 40 CFR 1502.1). An EIS describes the purpose of and need for the proposed action, a range of reasonable alternatives that would address the purpose and need, and the affected environment. It presents a detailed analysis of the potential impacts resulting from each reasonable alternative. The EIS also documents the project's compliance with other applicable environmental laws, regulations, and executive orders.

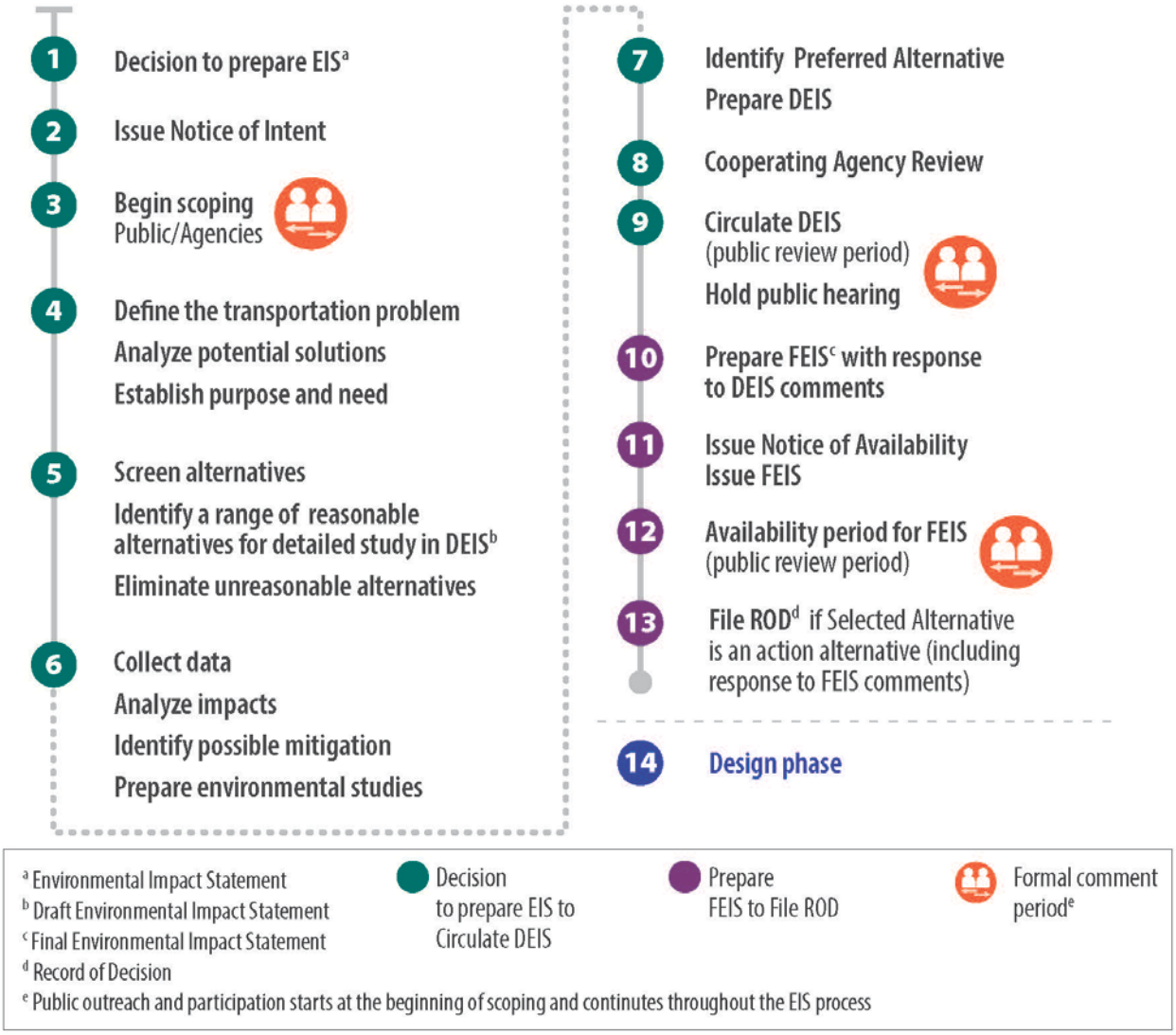
Actions requiring an EIS are considered Class I actions (23 CFR 771.115). Examples of Class I actions that normally require an EIS are:

1. A new controlled-access freeway
2. A highway project of four or more lanes in a new location
3. Construction or extension of a fixed transit facility (for example, rapid rail, light rail, commuter rail, bus rapid transit) that will not be located within an existing transportation right-of-way
4. New construction or extension of a separate roadway for buses or high-occupancy vehicles not located within an existing highway facility

Fewer than 5 percent of federal-aid highway projects involve EISs. EISs are generally prepared for the most complex projects with the largest environmental impacts and require the most time and resources to complete.

Figure 4 shows the basic steps undertaken to prepare an EIS. The process is basically the same for the types of EISs described in Section 8.1. For a supplemental EIS, it is important to determine the extent to which a change has occurred, whether agency and public scoping is needed, whether the initial purpose and need has changed, whether new alternatives have been added and require screening, and whether other similar changes have occurred that could affect the steps in the process.

Figure 4. EIS preparation process



8.1 Types of EISs

ADOT uses three types of EIS processes and documents to support its transportation decision-making process and the delivery of projects throughout the state: project-level, tiered, and supplemental.

8.1.1 Project-level EIS

The most common type of EIS is prepared for a specific project and is referred to as a project-level EIS. A project-level EIS evaluates a proposed action with known, defined elements and location and well-defined implementation, construction, and operation characteristics. The proposed action would have independent utility and logical termini, and would be part of an overall transportation program, such as a regional transportation plan.

8.1.2 Tiered EIS

A tiered EIS is also referred to as a programmatic EIS. It is used when a project-level EIS is not appropriate but a decision on proposed transportation improvements is needed. With a tiered EIS approach, the environmental analysis starts at the broadest, or programmatic, level (Tier 1). A Tier 1 EIS evaluates the effects of broad proposals or planning-level decisions that may include:

- a wide range of individual projects
- implementation over a long time frame
- implementation across a large geographic area

The level of detail in a Tier 1 EIS is sufficient to allow an informed decision to be made among broad planning-level alternatives and to develop broad mitigation strategies. For a transportation project, a Tier 1 EIS would typically select among several alternative corridors under consideration for future specific transportation projects. Project-level issues such as specific design details and precise project footprint are not evaluated in the Tier 1 EIS; this information is not available for consideration at the planning level. A Tier 1 EIS is typically followed by site-specific environmental reviews that may take the form of a project-specific EIS, an EA, or a CE.

For ADOT, use of a tiered EIS may be appropriate to analyze a broad transportation problem where funding for improvements is not yet identified and where no project is included in a fiscally constrained regional transportation plan. The tiered EIS process would allow ADOT to approve a project at a corridor level to facilitate planning activities within the affected jurisdictions before implementation of site-specific projects.

A Tier 1 EIS identifies transportation and environmental conditions within a study area, identifies a range of feasible opportunities for improvements, and evaluates the environmental effects of concept-level improvements. Information presented in a Tier 1 EIS is based primarily on available information; close coordination with local, state, and federal officials; and limited field surveys. This level of analysis is commensurate with the corridor-level decisions being made and is at an appropriate level of detail to allow a comparison of the relative differences in the range of costs and potential impacts of the improvement concepts. The build alternatives selected through the Tier 1 EIS would be analyzed in more detail in subsequent Tier 2 project-specific NEPA studies. Subsequent Tier 2 studies at the project level would address site-specific details and NEPA review may be through EISs, EAs, or CEs.

8.1.3 Supplemental EIS

A supplemental EIS is prepared if substantial changes related to environmental concerns are made to a proposed action, or if new circumstances or information relevant to the environmental concerns of the proposed action become known. Circumstances such as development of a new alternative for consideration or design changes that result in new significant environmental impacts would likely require a supplemental EIS. Both a draft and final EIS may be supplemented because of substantial new or changed circumstances. A supplemental draft EIS would be prepared, if necessary, when major changes occur prior to approval of the final EIS. If circumstances relevant to the decision

change substantially after the final EIS and ROD are approved, a supplemental final EIS would be prepared.

8.2 Efficient Environmental Review Process

Congress has recently made efforts to streamline transportation projects, establishing the "Efficient Environmental Review Process," which is mandatory for EISs and is codified at 23 USC 139, with the following requirements:

- USDOT is the lead agency for projects under 23 USC 139. For ADOT projects, FHWA is typically the modal administration involved. Under NEPA Assignment, ADOT takes the lead agency role for all 23 USC 139 activities.
- The lead agency must invite all federal, state, local, and tribal government agencies that may have an interest in the project to be participating agencies [23 USC 139(d)].
- Agencies defined as participating and cooperating agencies must carry out their obligations under other applicable laws concurrently and in conjunction with their NEPA review in a timely and environmentally responsible manner [23 USC 139(d)(7)].
- The lead agency must develop a coordination plan for public and agency participation and comment during the environmental review process; the plan must include a schedule [23 USC 139(g)].
- Participating agencies and the public must be given an opportunity for providing input in the development of the project purpose and need and the range of alternatives to be considered [23 USC 139(f)].
- The lead agency must collaborate with participating agencies on the appropriate methodologies to be used and the level of detail for the analysis of project alternatives [23 USC 139(f)(4)(C)].
- The lead agency and participating agencies must work cooperatively to identify and resolve issues that could delay the completion of the environmental review process or result in denial of any approvals required for the project under applicable laws. 23 USC 139(h) provides an issue identification and resolution process, including referral to CEQ and financial penalties.
- To the maximum extent practicable, all permits and reviews for a transportation project should rely on a single NEPA document developed by the lead agency. That NEPA document must be sufficient to satisfy the requirements for any federal approval or other federal action for the project, including federal agency permits [23 USC 139(d)(8)].
- A 150-day statute of limitations is established for project judicial review, provided that a notice of final agency action is published in the *Federal Register* [23 USC 139(l)].
- A single document including both the final EIS and ROD should be used, unless:
    - The final EIS makes substantial changes to the proposed project relevant to environmental or safety concerns, or

- There are significant new circumstances or information relevant to environmental concerns that bear on the proposed project or its impacts [23 USC 139(n)].

The FHWA/Federal Transit Administration *SAFETEA-LU Environmental Review Process Final Guidance*[5] and *Final Guidance on MAP-21 Section 1319 Accelerated Decisionmaking in Environmental Reviews*[6] provide additional guidance on complying with the 23 USC 139 environmental review process. The AASHTO Practitioner's Handbook 9, *Using the SAFETEA-LU Environmental Review Process (23 U.S.C. 139)*, is also a useful resource for working with 23 USC 139.

8.2.1 Environmental Review Process Participants

Lead Agency: Under NEPA Assignment, ADOT is the federal lead agency for assigned projects. As the direct recipient of federal-aid funds, it is also required to be a joint lead agency under 23 USC 139(c)—thus, ADOT serves in both roles. At ADOT's discretion, other federal, state, or local agencies may act as joint lead agencies. See the *SAFETEA-LU Environmental Review Process Final Guidance*[7] for additional information.

Participating Agencies: The environmental review process established a new agency category, called the "participating agency." This category is intended to encourage interested agencies at all levels of government to become engaged in the project and its NEPA evaluation. Any agency that "may have an interest in the project" must be invited to become a participating agency in the project environmental review [23 USC 139(d)]. There is a high bar for designating federal participating agencies: any federal agency invited to be a participated agency is designated as a participating agency unless it declines in writing, stating that it:

- Has no jurisdiction or authority with respect to the project;
- Has no expertise or information relevant to the project; *and*
- Does not intend to submit comments on the project.

State and local agencies are designated as participating agencies only if they agree in writing to serve as a participating agency. Participating agency invitation letters are required to be sent within 45 days of the NOI (see below) and must include a deadline for response.

Cooperating Agencies: Cooperating agencies are defined as any federal agency with jurisdiction by law or special expertise for any environmental issue that will be addressed in the EIS [40 CFR 1508.5, see also 40 CFR 1501.6 and 23 CFR 771.111(d)]. Any federal agency that meets this definition must be invited to be a cooperating agency. Any cooperating agency also meets the definition of a participating agency and needs to be formally invited to serve in both roles.

[5] https://www.fhwa.dot.gov/hep/guidance/section6002/page00.cfm

[6] https://www.transportation.gov/sites/dot.gov/files/docs/MAP-21_1319_Final_Guidance.pdf

[7] https://www.fhwa.dot.gov/hep/guidance/section6002/section6002.pdf

8.3 Notice of Intent

The EIS is initiated with the publication of an NOI, published in the *Federal Register*. The NOI informs the public of the upcoming EIS study and analysis and provides information regarding how the public can become involved. ADOT prepares the NOI once it has consulted with any other project sponsors and has decided to prepare an EIS (23 CFR 771.123). Only federal agencies are permitted to publish in the *Federal Register*, so ADOT submits the NOI to FHWA for publication. The NOI includes the following (40 CFR 1508.22):

- description of the proposed project and its alternatives, including the no-build alternative
- information regarding the scooping process, including where and when scoping meetings will be held
- contact information for ADOT staff who will answer questions about the proposed project and EIS

ADOT also uses the NOI to formally initiate the 23 USC 139 environmental review process by including the following in the NOI:

- type of work involved
- proposed project termini, length, and general location
- list of other anticipated federal approvals required for the project

ADOT posts the NOI on its website.

See FHWA Technical Advisory T 6640.8A, Appendix B, for more information regarding the NOI content and format. Another document, *Federal Register Document Drafting Handbook* (October 1998 revision), provides detailed instructions on preparing notices for the *Federal Register*.

The following statement must appear in the NOI:

> *The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by ADOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated April 16, 2019, and executed by FHWA and ADOT.*

8.4 Early Public and Agency Involvement

Public and agency involvement is an essential element of EIS development. Because an EIS is prepared for only the most complex projects with significant environmental issues, public and agency involvement is robust and specific steps are required. EIS public involvement requirements are intended to enhance public and agency engagement so issues that could delay project approval are identified early and resolved efficiently, with streamlined environmental approval and efficient project delivery being the goal. Federal agencies are directed to collaborate on issues and, where possible, to develop a single EIS that addresses the requirements of all federal agencies that must take action on the

project (for example, approvals and/or permits issued under the Endangered Species Act, National Historic Preservation Act, and Clean Water Act).

8.4.1 Coordination Plan and Checklist

The 23 USC 139 environmental review process requires that a coordination plan be developed and in place within 90 days of NOI publication [23 USC 139(g)]. The plan addresses how agencies and the public will participate and provide input during the environmental review process. An environmental review process schedule—established after consultation with and concurrence of each participating agency—is a required element of the coordination plan. Coordination plans are sent to participating agencies for review and comment.

As part of the 23 USC 139 process [23 USC 139(e)(5)], the lead agency, in consultation with participating agencies, is also required to develop a checklist to help project sponsors identify potential natural, cultural, and historic resources in the area of the project. The checklist is intended to assist the lead agency and project sponsor:

- identify resource agencies and organizations that can provide information about natural, cultural, and historic resources;
- develop the information needed to determine the range of alternatives; and
- improve interagency collaboration to help expedite the permitting process for the lead agency and participating agencies.

ADOT uses FHWA's Environmental Review Process Checklist[8] for projects subject to 23 USC 139.

8.4.2 Scoping

Scoping is an early and open process through which the NEPA lead agency gathers input from agencies and the public to determine the scope of issues to be addressed in the EIS and to identify the significant issues related to the proposed action (40 CFR 1501.7). The project purpose and need and range of alternatives to be addressed in the EIS are also identified through the scoping process (23 CFR 771.123). As part of the scoping process, the lead agency invites the participation of affected federal, state, and local agencies, affected Native American tribes, and the interested public (40 CFR 1501.7). Participating agencies and the public must be given the opportunity to provide input on the development of the purpose and need and range of alternatives to be considered [23 USC 139(f)]. Following this input, the lead agency determines the project purpose and need and range of alternatives to be considered for the project. The lead agency, in collaboration with participating agencies, also determines the methodologies to be used and level of detail required for analysis of project alternatives [23 USC 139(f)].

Participating agency invitations are sent out early in the scoping process, as required by 23 USC 139(d). Copies of these letters are included in the EIS, along with responses received and documentation of any early coordination meetings held with agencies or tribes.

[8] https://www.environment.fhwa.dot.gov/legislation/authorizations/safetealu/reviewProcess_checklist.aspx

While public meetings are not required as part of the scoping process, ADOT typically holds a public scoping meeting to solicit feedback from the public. Notification of any scoping meeting must be published in a local or regional newspaper and will comply with FHWA's public involvement requirements for Title VI, LEP, and EJ as stated in ADOT's PIP.

All scoping comments received from agencies, tribes, and the public are considered in further development of the project and EIS. ADOT gives careful consideration to input received in determining how to best advance the EIS. ADOT responds to all scoping comments received and prepares a scoping summary report. The summary report is consulted during development of the EIS and included in the project file. A summary of scoping activities is also included in the EIS.

8.5 Developing the Draft EIS

The EIS presents a detailed evaluation of the proposed action and alternatives. Each alternative under consideration should be discussed in comparable detail to allow the reader to evaluate the comparative merits of the alternatives. The impacts associated with each alternative must be objectively analyzed and rigorously evaluated. The EIS describes the area's existing natural, physical, and social environment and discusses the potential direct, indirect, and cumulative environmental effects of the project alternatives.

FHWA's Technical Advisory T 6640.8A, *Guidance for Preparing and Processing Environmental and Section 4(f) Documents*, suggests that the information listed in Table 3 be included in the EIS.

The target audience for an EIS is the general public, public officials, and regulatory agencies. Clear, plain language should be used to convey information. Tables, figures, and photographs or other graphics should be used to assist readers with their review and understanding of the project. All technical studies and other materials used to develop the EIS must be kept in the project file.

A preferred alternative may be identified in the draft EIS that is made available for public review and should be identified at that time if ADOT has identified a preferred alternative. Otherwise, the preferred alternative is identified in the final EIS. Note that to use a combined final EIS and ROD, the preferred alternative must be identified in the draft EIS. To use this approach, the draft EIS must provide notification that the final EIS and ROD will be combined when it is filed with the U.S. Environmental Protection Agency (EPA).

ADOT has established an outline to be followed for all EISs (see Appendix A).

Table 3. Contents of an EIS

Section	Description
Cover sheet	The cover sheet presents the project name and project limits and identifies the NEPA lead agency and any cooperating agencies. The deadline for submitting comments and the location where comments should be sent are also included. ADOT's EIS approval signature is placed on the cover sheet. Under NEPA Assignment, the following language must be included on the EIS cover page in a way that is conspicuous to the reader: *The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by ADOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated April 16, 2019, and executed by FHWA and ADOT.*
Summary	The summary should include a brief description of the proposed action, route, termini, type of improvement, length of project, county, city, state, and other information as appropriate. It should also summarize all reasonable alternatives considered, major environmental impacts (beneficial and adverse), areas of controversy, major unresolved issues with other agencies, and any other federal actions required as a result of the proposed action.
Table of contents	
Purpose of and need for action	The transportation need that the proposed action is intended to satisfy is the focus of the purpose and need section of the EIS. The need should be well-defined and in terms the general public can clearly understand. The purpose and need also typically describes the proposed action or project, its length and termini or study area, and important background information. See Section 3, *Purpose and Need*, for additional information on the purpose and need.
Alternatives	The EIS alternatives chapter describes the reasonable alternatives that are being evaluated to meet the purpose of and need for the proposed action. CEQ defines the term "reasonable" as those alternatives that are "practical and feasible from a technical and economic standpoint using common sense" (CEQ's NEPA's 40 Most Frequently Asked Questions,[9] Guidance, Question 2A). The alternatives chapter describes all alternatives considered for the proposed action and how they were screened to eliminate unreasonable alternatives, leaving a range of reasonable alternatives and a no-build alternative to be presented and evaluated in detail in the EIS. The no-build alternative is always included in the EIS; it is the benchmark against which the impacts of the other alternatives are compared and describes the situation that would occur without the proposed action. FHWA Technical Advisory T T6640.8A provides a detailed discussion of the factors that might be considered in determining what constitutes a reasonable range of alternatives. The discussion of each alternative includes a clear, nontechnical description of the alternative, its location, termini, costs, right-of-way needs, and specific features. The draft EIS should identify ADOT's preferred alternative, if one exists. Identifying the preferred alternative in the draft EIS allows ADOT to take advantage of the combined final EIS/ROD efficiency option of 23 USC 139 (see USDOT's *Final Guidance on MAP-21 Section 1319 Accelerated Decisionmaking in Environmental Reviews*[10] for additional information). The preferred alternative is generally the one that ADOT believes would best fulfill its mission and responsibilities while meeting the project purpose and need and minimizing impacts on the environment, and is supported by the public and resource agencies. Typically, alternatives are adjusted throughout the NEPA process to minimize harm to the environment and communities. The preferred alternative is typically the alternative that has incorporated these changes and achieves the best balance between needs, impacts, costs, and regulatory requirements. ADOT may develop the preferred alternative to a higher level of detail than other alternatives to facilitate development of mitigation measures or concurrent compliance with other applicable laws, as long as the consideration of other alternatives is not prejudiced [23 CFR 139(f)].

[9] https://www.energy.gov/sites/prod/files/G-CEQ-40Questions.pdf

[10] https://www.transportation.gov/sites/dot.gov/files/docs/MAP-21_1319_Final_Guidance.pdf

Table 3. Contents of an EIS

Section	Description
Alternatives (continued)	If no clear preferred alternative has been identified by the time the draft EIS is ready for public review, the draft EIS should explain that a preferred alternative will be identified in the final EIS. The draft EIS should also explain that the selection of an alternative will not be made until the ROD is issued, after any additional input received on the final EIS has been fully evaluated. Consult the following references for additional guidance in the development and analysis of alternatives: • FHWA Technical Advisory on NEPA document preparation (T 6640.8A) • AASHTO Practitioner's Handbook 15: *Preparing High Quality Environmental Documents for Transportation Projects*[11] • FHWA Environmental Review Toolkit,[12] for methods and analyses regarding specific environmental resource categories, including sections on purpose and need, alternatives, and the EIS • 23 USC 139, Efficient Environmental Reviews for Project Decisionmaking, to assist the reviewer in verifying that all necessary components are included in the EIS Additional information on alternatives development is discussed in Section 4 of this guidance.
Affected environment	The affected environment section of the EIS provides context for the evaluation of impacts of the alternatives. It identifies the area's existing environmental resources and their condition. The section should discuss—commensurate with the importance of the impact—the existing social, economic, and environmental setting. Also, it should identify environmentally sensitive features. The use of graphics and/or photographs for this purpose is especially effective. Descriptions should be no longer than needed to understand the area and the context for impacts of the alternatives.
Environmental consequences	The environmental consequences section of the EIS describes the impacts of project alternatives on the environment and documents the methodologies used in evaluating these impacts, along with agency consultation that influenced the impact evaluation. Alternatives are assessed to determine how each addresses the transportation issues identified in the purpose and need, as well as potential impacts on the identified resources. The direct and indirect environmental impacts of each of the alternatives and the potential measures that could be taken to avoid, minimize, or mitigate these impacts must be described. Cumulative impacts that would result from the action must also be discussed. Mitigation must be considered for all impacts, regardless of their significance. Environmental impacts should be discussed in terms of their context and intensity. Information in this section is used to compare the alternatives and their impacts.
List of preparers	
List of agencies, organizations, and persons to whom copies of the EIS are sent	
Comments and coordination	The EIS must present a summary of the scoping process and the results of meetings, consultations, coordination, and comments received during scoping. The comments and responses must be summarized in this chapter and be attached in an appendix to the EIS. Early and ongoing coordination activities with agencies and the public are discussed in this section, along with any key issues of concern agencies or the public may have. In the final EIS, agency and public comments on the draft EIS and ADOT responses to those comments are summarized in this chapter and included in an appendix to the final EIS.
Index	
Appendices	

[11] http://www.environment.transportation.org/pdf/programs/pg15-1.pdf

[12] https://www.environment.fhwa.dot.gov/about/topic_list.aspx

Table 3. Contents of an EIS

Section	Description
Section 4(f) evaluation	If the project will use a Section 4(f) property, or if properties protected by Section 4(f) are near the project, a Section 4(f) evaluation is prepared; it is placed in a separate section of the EIS.

8.6 Draft EIS Review and Approval

ADOT requires the consultant preparing the EIS and supporting technical documents to conduct a technical QC review of all documents prior to submittal to ADOT for review. Consultant QC review includes a thorough technical edit (spelling and grammar) and a review for format, structure, and accurate content. A transmittal letter documenting completion of the consultant QC review accompanies the submittal.

ADOT technical specialists assigned to the project are responsible for reviewing technical reports prepared in support of the EIS. Technical specialists also work with the EIS consultant to develop avoidance, minimization, and mitigation measures for resources in their area of expertise.

See Section 6.2, *Quality Control*, and ADOT's *Environmental Planning Quality Assurance/Quality Control Plan* for additional information regarding QC review for the EIS.

When all comments have been addressed, the environmental planner submits the draft EIS to the NEPA Assignment manager for review and to the Arizona AGO and/or assigned outside environmental counsel for a 4-week legal review. The legal review assesses the EIS for compliance with legal requirements. At the completion of the legal review and any necessary EIS revisions, AGO prepares a written statement that the legal review has been completed and that all legal comments have been appropriately addressed. The draft EIS will not be approved for public circulation until the legal review is satisfactorily completed. The statement documenting completion of legal review is included in the project file. Legal review communications are confidential and legal comments remain within ADOT; they are not available for public or agency distribution or review. Once legal review has been completed and the draft EIS is ready for public review, the NEPA Assignment manager recommends approval of the draft EIS to the ADOT EP administrator, who signs the draft EIS to denote approval for public review.

8.7 Public Review of the Draft EIS

Once the draft EIS is approved by the ADOT EP administrator, ADOT makes the draft EIS available for public review. ADOT's PIP will be used to notify the public and meet FHWA requirements to reach potential Title VI and EJ populations.

Under NEPA Assignment, ADOT files the draft EIS with EPA as specified in 40 CFR 1506.9 prior to its formal release for public and agency review and comment. EPA publishes an NOA of the EIS in the *Federal Register* (40 CFR 1506.10). The NOA invites comments from all interested parties and identifies where the draft EIS can be reviewed,

the date by which comments must be received, and the address of the person to which comments should be sent.

In accordance with 23 CFR 771.123(i), the draft EIS must be available for public review and comment for not less than 45 days and not more than 60 days, unless ADOT (under NEPA Assignment) establishes a different comment period with the agreement of all participating agencies.

All draft EISs are submitted electronically to EPA through the use of the EPA e-NEPA online tool.[13] After receiving the draft EIS, the Office of Federal Activities EIS Filing Section prepares and publishes the NOA of the draft EIS for publication in the *Federal Register*. EPA assigns a unique identifier number to each EIS; this number is used for the final EIS and any other correspondence with EPA or publication in the *Federal Register* pertaining to the project.

NOAs are published only on Fridays in the *Federal Register*. EPA must receive a draft EIS by the end of the preceding week in order for the notice to be published on the following Friday.

ADOT also publishes a notice with the information in the NOA in a newspaper with local or regional circulation and on the study website. This notice is also sent to affected federal, state, and local agencies.

The following statement must appear in the NOA for the draft EIS:

> *The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by ADOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated April 16, 2019, and executed by FHWA and ADOT.*

In addition to NEPA, other environmental regulations require public review activities. If the project would affect floodplains, wetlands, or historic properties, or involve *de minimis* impacts on Section 4(f) properties, the NOA should provide this information to satisfy public review requirements for these resources.

8.8 Public Hearing

FHWA's public involvement requirements [23 CFR 771.111(h)] dictate that one or more public hearings or opportunities for public hearings be held for projects requiring an EIS. The public hearing is held during the draft EIS comment period. Whenever a public hearing is held, the draft EIS must be available at the public hearing and for a minimum of 15 days in advance of the public hearing [23 CFR 771.111(h)]. The following information is to be explained at the public hearing, as applicable:

- purpose of and need for the project and its consistency with local plans
- alternatives and major design features
- impacts of the project
- relocation assistance program and right-of-way acquisition process

[13] https://www.epa.gov/nepa/environmental-impact-statement-filing-guidance

- ADOT's procedures for receiving public comments, both oral and written

And, as a practical matter, to help the public gain a basic understanding of the NEPA process, include information on the following topics at any hearing:

- What is NEPA?
- What is the purpose and need?
- What is the No-Build Alternative?

For additional information on the public hearing and how the agency will meet FHWA requirements for Title VI, LEP, and EJ in public engagement, see Section 5, *Public Involvement*, and the ADOT PIP.

8.9 Developing the Final EIS

At the end of the public review period, ADOT reviews all comments received on the draft EIS and considers these comments in developing the final EIS. ADOT or its consultant develops a response for each substantive comment received. Comments received during the public review period, and the responses, are included in the final EIS. Once comments have been addressed, the final EIS can be prepared. It identifies the preferred alternative, explains why it was preferred, and evaluates all reasonable alternatives considered [23 CFR 771.125(a)(1), FHWA Technical Advisory T 6640.8A(J)]. If the preferred alternative identified in the final EIS is different from the preferred alternative presented in the draft EIS, the final EIS must clearly identify the changes, describe the reasons for the changes, and discuss the reasons why any new impacts are not of major concern. The final EIS must also discuss any responsible opposing view that was not adequately addressed in the draft EIS and provide ADOT's response to the issues raised [40 CFR 1502.9(b)].

The final EIS also summarizes agency involvement and documents compliance with all applicable environmental laws and executive orders (for example, Section 7 of the Endangered Species Act, Section 106 of the National Historic Preservation Act, and Section 404 of the Clean Water Act). When it is not possible to comply with all other applicable requirements, the final EIS must provide reasonable assurance that such requirements can be met [23 CFR 771.125(a)(1)]. Mitigation measures that are to be incorporated into the proposed action are described. Those mitigation measures presented as commitments in the final EIS will be incorporated into the project [23 CFR 771.109(b) and (d)].

The following statement must appear on the cover page of the final EIS:

> *The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by ADOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated April 16, 2019, and executed by FHWA and ADOT.*

8.10 Final EIS Review and Approval

Review of the final EIS occurs in the same manner as the draft EIS review, as described previously. Once all comments have been addressed and the environmental planner believes the final EIS is ready for approval, the environmental planner fills out the EIS Quality Control Form and submits it along with the final EIS to the NEPA Assignment manager.

8.10.1 Legal Sufficiency

The NEPA Assignment manager also submits the final EIS to the AGO for a legal sufficiency review. The final EIS may not be approved until it has been determined to be legally sufficient [23 CFR 771.125(b)]. The AGO provides the NEPA Assignment manager written confirmation that the final EIS is legally sufficient and can be approved.

8.10.2 Final EIS Approval

Following the NEPA Assignment manager's review and the determination of legal sufficiency, the NEPA Assignment manager recommends approval of the final EIS to the ADOT EP administrator, who signs the final EIS to denote final approval.

When the final EIS has been approved, it follows the same filing and NOA process with EPA as the draft EIS, as described in Section 8.7, *Public Review of the Draft EIS*. The final EIS is available for public review and comment for a 30-day period.

The following statement must appear in the NOA for the final EIS:

> *The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by ADOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated April 16, 2019, and executed by FHWA and ADOT.*

This information is also published in a local or regional newspaper and posted on the project website. Email notification is sent to all involved agencies. The final EIS is made available at ADOT and on the ADOT EP Approved Environmental Documents web page. The public hearing transcript, public comments and ADOT responses, and a public hearing summary report are placed in the project file. For additional information on the public notification process, including FHWA requirements for Title VI, LEP, and EJ, see Section 5, *Public Involvement*.

8.11 Record of Decision

After preparing the final EIS and selecting a project alternative, ADOT prepares a draft ROD. The draft ROD is reviewed by the NEPA Assignment manager and approved by the ADOT EP administrator. The ROD may be signed no sooner than 30 days after publication of the final EIS notice in the *Federal Register* or 90 days after publication of a notice for the draft EIS, whichever is later. The ROD represents ADOT's final decision on the project.

The ROD presents the selected alternative and the basis for its selection (40 CFR 1505.2). It briefly describes each alternative and explains the balancing of values that

formed the basis of the alternative selection. The ROD must also identify the environmentally preferred alternative (or alternatives) and—if a different alternative is selected—state the reasons why the environmentally preferred alternative was not selected. The ROD summarizes any mitigation measures that will be incorporated in the project and documents any required Section 4(f) approval.

The ROD should identify and respond to all substantive comments received on the final EIS [FHWA Technical Advisory T 6640.8A (VIII)(F)].

The following statement must appear in the ROD:

> *The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by ADOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated April 16, 2019, and executed by FHWA and ADOT.*

8.11.1 Combined Final EIS/Record of Decision

Following the streamlining requirements of 23 UCS 139(n) and the updated 23 CFR 771.124, *Final environmental impact statement/record of decision document* (October 29, 2018), after circulation of a draft EIS and consideration of comments received, the lead agency must combine the final EIS and ROD, to the maximum extent practicable, unless:

1. The final EIS makes substantial changes to the proposed action that are relevant to environmental or safety concerns; or
2. There are significant new circumstances or information relevant to environmental concerns that bear on the proposed action or the impacts of the proposed action.

To take advantage of this approach, the preferred alternative must be identified in the draft EIS. In addition, the draft EIS must provide notification that the final EIS and ROD will be combined to follow this approach. For additional information regarding the combined final EIS/ROD, see USDOT's *Final Guidance on MAP-21 Section 1319 Accelerated Decisionmaking in Environmental Reviews*[14] and the draft FHWA/Federal Transit Administration *Revised Environmental Review Process Guidance for Public Comment*.[15]

The ADOT EP administrator determines whether to combine the final EIS and ROD based on the specifics of the proposed action, the cooperating and participating agencies involved, and the above guidance.

When a combined final EIS/ROD is prepared, the applicable requirements for both a final EIS and ROD must be met (MAP-21 Final Guidance, 23 CFR 771.125). The combined final EIS and ROD are made available to all agencies and individuals who provided substantive comments on the draft EIS or who requested a copy (40 CFR 1502.19). If the final EIS and ROD are combined, they cannot be signed any sooner than 90 days after the publication of the NOA of the draft EIS.

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[14] https://cms.dot.gov/sites/dot.gov/files/docs/MAP-21_1319_Final_Guidance.pdf

[15] https://www.fhwa.dot.gov/map21/docs/12mar_prop_env_proc_review_pc.pdf

8.12 Statute of Limitations and Limitation of Claims Notice

The statute of limitations on legal claims against a ROD and other related transportation project actions, such as a Section 404 permit, can be limited to 150 days provided specific conditions are met. The 150-day statute of limitations was established in 23 USC 139(l)(1). The ROD or other final agency action must be related to a transportation project, and a limitation of claims notice must be published in the *Federal Register* for the 150-day statute of limitations to apply. It reduces the statute of limitations for challenging a federal agency decision for a project from 6 years to 150 days. Publication in the *Federal Register* starts the clock for the statute of limitations. The *Federal Register* limitation of claims notice is separate from the NOA and is often prepared later in the process. The NEPA Assignment manager is responsible for coordinating the placement of the notice in the *Federal Register* with FHWA's Arizona Division.

8.13 Supplemental EIS

As described in Section 8.1.3 of this section, if an agency makes substantial changes to the proposed action or if it discovers significant new information relevant to environmental concerns that may affect the proposed action or its impacts, a supplement to either a draft or final EIS may be needed. If a supplemental draft or final EIS is warranted, the document is prepared following the procedures for developing a draft and final EIS outlined earlier in this section, including public and agency involvement, QC, and ADOT review and approval.

8.14 Coordinating Other Environmental Reviews with NEPA

This section describes the need to coordinate and sequence the NEPA EIS preparation and review process with the requirements of other environmental laws and regulations for review, comment, coordination, and consultation. While environmental reviews can be required for an EIS for numerous laws and regulations based on the type, location, and complexity of the ADOT project, this section focuses on the four laws that tend to involve reviews for EIS documents:

- Clean Water Act Section 404 permitting process, under the jurisdiction of USACE
- National Historic Preservation Act Section 106 consultation process, under the jurisdiction of the Advisory Council on Historic Preservation
- Endangered Species Act Section 7 compliance, under the jurisdiction of USFWS
- Department of Transportation Act of 1966 Section 4(f) compliance

This section provides an abbreviated discussion of how to coordinate and sequence the review process for the four environmental laws listed above with the NEPA process for an EIS.

More detailed information is available in the following publications from FHWA and AASHTO:

- FHWA 2015 Red Book – *Synchronizing Environmental Reviews for Transportation and Other Infrastructure Projects*, Publication No. FHWA-HEP-15-047, September 2015 (includes Appendix C – Coordination & Implementation Table for a Sample EIS Project)
- AASHTO Practitioner's Handbook 17 – *Complying with Section 7 of the Endangered Species Act for Transportation Projects*, November 2016
- AASHTO Practitioner's Handbook 06 – *Consulting under Section 106 of the National Historic Preservation Act*, August 2016
- AASHTO Practitioner's Handbook 11 – *Complying with Section 4(f) of the U.S. DOT Act*, May 2009

In addition to the publications listed above, numerous resources on how to properly comply with and consult on the four environmental laws are available on the ADOT EP and FHWA websites.

Table 4 illustrates the environmental review and coordination milestones for Section 404, Section 7, Section 106, and Section 4(f) when ADOT has determined that an EIS is needed for a given ADOT project. The stages of the EIS are shown, along with the activities, submittals, findings, and decisions that would most usually occur for each stage. These stages can serve as "checkpoints" to ensure that environmental reviews for each regulation are being sequenced or synchronized properly with the NEPA process—providing a mechanism to direct or redirect actions or activities accordingly.

Additionally, this can be used as the basis for developing a concurrent review process by ADOT and reviewing agencies to improve the efficiency of the environmental review process for ADOT projects, as specified in 23 USC 139 (Efficient environmental reviews for project decisionmaking). The foundation of this method relies on ADOT's ability to get agencies to actively participate in the reviews and communicate with one another—as well as applicants and sponsors—in an effective, timely, and structured manner that starts early and continues throughout the review process.

Table 4. NEPA EIS and other environmental review and coordination milestones

National Environmental Policy Act	Clean Water Act Section 404	Endangered Species Act Section 7	National Historic Preservation Act Section 106	Department of Transportation Act Section 4(f)
Develop project plan and schedule				
Issue NOI (ADOT; ongoing process)	Conduct preapplication evaluation/coordination (ADOT; ongoing process)	Seek federal, tribal, and state agency technical assistance/ preliminary species list (ongoing process)	Review ADOT 2015 Programmatic Agreement/ preliminary cultural resources list (ongoing process)	Create preliminary Section 4(f) resources list to include parks, recreation areas, wildlife and waterfowl refuges, and historic properties (ADOT; ongoing process)
Checkpoint 1: Create purpose and need and conduct scoping				
Conduct scoping (ADOT; ongoing process)	Conduct preapplication evaluation/coordination (ADOT; ongoing process)	Seek "may be present"/"may affect" determination for species/critical habitat (ADOT; ongoing process) Conduct USFWS consultation (ongoing process)	Define area of potential effects, identify consulting parties, evaluate National Register of Historic Places eligibility, make a determination of effect, conduct consulting party review, conduct public involvement (ongoing process)	Identify/evaluate Section 4(f) applicable properties (ADOT; ongoing process)
Checkpoint 2: Identify range of alternatives				
Evaluate and integrate applicable scoping comments (ADOT; ongoing action)	Conduct preapplication evaluation/coordination (ADOT; ongoing process) Submit jurisdictional delineation form and attachments (ADOT; action)	Submit biological evaluation with "not likely to affect" (ADOT; action) and conduct USFWS consultation (ongoing process) Submit biological evaluation with "likely to affect" (ADOT; action) and conduct formal USFWS consultation (ongoing process)	Conduct determination of effect review and resolution of adverse effect (consulting parties and State Historic Preservation Office; action) Facilitate ongoing consulting parties' review and coordination	Conduct public use coordination with resource officials (ADOT; ongoing process), considering the following: "Use" qualifies as *de minimis* determination (ADOT; action) "Use" qualifies as programmatic evaluation (ADOT; action) "Use" requires individual Section 4(f) evaluation (ADOT; action)

Table 4. NEPA EIS and other environmental review and coordination milestones

National Environmental Policy Act	Clean Water Act Section 404	Endangered Species Act Section 7	National Historic Preservation Act Section 106	Department of Transportation Act Section 4(f)
Publish draft EIS, hold comment period and public hearing, identify preferred alternative, if applicable				
Begin final EIS (ADOT; ongoing process)	Make jurisdictional determination (USACE; action) Prepare/submit application (ADOT; action) Address USACE comments (ADOT; action)	Submit revised biological evaluation (ADOT; action) and conduct USFWS consultation (ongoing process)	Prepare draft memorandum of agreement or programmatic agreement, seek review/ comment by consulting parties, conduct ADOT response/ revision (consulting parties and ADOT; action)	Conduct additional public use coordination with resource officials (ADOT; ongoing process) Identify/evaluate feasible/ prudent avoidance/least harm alternatives (ADOT; action) Prepare draft Section 4(f) evaluation (ADOT; action) Seek resource officials' (federal, if applicable) review and comment, conduct ADOT response and revision (officials and ADOT; action) Conduct follow-up resource official coordination/legal sufficiency review/FHWA approval (ADOT; action and FHWA; action)

Table 4. NEPA EIS and other environmental review and coordination milestones

National Environmental Policy Act	Clean Water Act Section 404	Endangered Species Act Section 7	National Historic Preservation Act Section 106	Department of Transportation Act Section 4(f)
Checkpoint 3: Identify LEDPA and conceptual mitigation, provide final biological opinion				
Complete final EIS and identify preferred alternative if not identified in draft EIS (ADOT; ongoing process) Evaluate and rectify LEDPA and Section 7 and Section 4(f) avoidance alternatives (ADOT, USACE, USFWS, and FHWA, as applicable; action)	Identify LEDPA if individual permit is anticipated (ADOT; ongoing process)	Seek USFWS concurrence letter or biological opinion with jeopardy and/or destruction of adverse modification with reasonable and prudent avoidance alternatives (USFWS; action)		
Publish final EIS/USACE public notice				
Prepare and issue ROD and identify environmentally preferred alternative – whether or not it is the selected alternative (ADOT; action)	Seek USACE draft permit decision (USACE; action) Conduct USACE NEPA process for individual permit (USACE; action) in accordance with the One Federal Decision requirement in Executive Order 13807 USACE issues permit decision – Nationwide General Permit, Regional General Permit, or individual permit (USACE; action)	Present ROD/Section 7 mitigation measures (ADOT; action) or avoidance alternative (USFWS; action)	Present ROD/programmatic agreement standard measures or project-specific memorandum of agreement or programmatic agreement (ADOT; action)	Present ROD/project-specific mitigation measures or Section 4(f) least-harm alternative (ADOT; action) – other than constructive use decision in accordance with 327 MOU, Section 3.2.8 (FHWA; action)

9 EA and EIS Re-evaluations and Supplemental EISs

9.1 Re-evaluations

Re-evaluation of NEPA decisions is undertaken to determine the validity of a previously approved NEPA document. Note that re-evaluations are not required under NEPA or by the CEQ, but rather are required by FHWA regulation (23 CFR 771.129).

Re-evaluations are triggered by the following:

- substantial changes to the project, such as changes to engineering, design, or construction (for example, change in project footprint, change in construction timing, change in project elements)
- substantial changes to the environmental setting, such as federal delisting or new listing of a species
- changes in environmental laws, regulations, or policies
- changes to environmental commitments (for example, replacing an environmental commitment with a different one or learning that the commitment is not constructible) that could change the impacts discussed in the environmental document
- a 3-year time lapse between a draft EIS an approved final EIS or between a final EIS and a ROD [23 CFR 771.129(a) and (b)]
- when the project, or a phase of the project, proceeds to the next major federal approval (final design, right-of-way acquisition, construction) [23 CFR 771.129(c)]

The re-evaluation should consider the entire project analyzed in the original NEPA document. All environmental sections require re-evaluation to review whether impacts have changed as compared with the previous NEPA document and whether any impact changes result in new or significant impacts (consider whether the changes would cause impacts that are different in type or intensity compared with the original NEPA document). Documentation should be appropriate to the project changes, environmental impacts from the changes, potential for controversy, and length of time since the last NEPA document was completed.

The re-evaluation does not require public circulation unless changes to environmental resources with legal public involvement requirements such as Section 4(f) and Section 106 are involved or ADOT believes public circulation of the re-evaluation is in its best interest.

There are three possible outcomes for a re-evaluation:

- Supplemental environmental document is not required. If this is the case, then the re-evaluation determines that the previous document/finding (EA/FONSI, EIS/ROD) is still valid.
- Preparation of a supplemental EA is required.

- Preparation of a supplemental EIS is required.

The ADOT environmental administrator approves the re-evaluation or makes the determination that a supplemental environmental document is necessary.

9.2 Supplemental EAs

If ADOT is uncertain regarding the significance of new impacts, a supplemental EA may be prepared [23 CFR 771.130(c)]. Alternatively, ADOT may know that the proposed project changes would not result in significant impacts, but would chose to prepare formal NEPA documentation to support the conclusion of no new significant impacts.

Analysis and documentation of a supplemental EA should focus only on changes to the project.[16]

The outcome of a supplemental EA will be either (1) a determination or validation that the new impacts are not significant and, thus, do not warrant an EIS or (2) a determination that the new impacts are significant and will require an EIS.

If significant impacts are not identified in the supplemental EA, an amended FONSI is prepared. If significant impacts are identified, a draft and final EIS would be prepared, followed by a ROD.

9.3 Supplemental EISs

Supplemental EISs are required under the following conditions [40 CFR 1502.9(c)]:

- A re-evaluation is completed after a draft EIS has circulated, and it identifies new significant impacts.
- Changes to the project (for example, design, scope) would result in significant environmental impacts not evaluated in the previously approved NEPA document.
- New information or circumstances related to environmental concerns would result in significant impacts not evaluated in the previously approved NEPA document.

A Supplemental EIS is not required if the project changes, new information, or new circumstances reduce environmental impacts without causing other environmental impacts that are significant or not evaluated in the previous EIS.

Sometimes, a supplemental EIS may be required to address issues of limited scope (for example, extent of mitigation or location of design change for a limited part of the overall project). In this situation, preparation of the supplemental EIS does not necessarily prevent the granting of new approvals, withdraw previous approvals, or suspend project activities not directly affected by the supplemental EIS (23 CFR 771.130).

A Supplemental EIS is developed and processed the same way the previous draft EIS, final EIS, and/or ROD were developed; the only difference is that scoping is not required (ADOT, however, may choose to conduct additional scoping if, for instance, the changes may be controversial).

[16] https://www.environment.fhwa.dot.gov/legislation/nepa/overview_project_dev.aspx

Below are some considerations for a supplemental EIS:

- Briefly describe the proposed action, the reason a supplemental EIS is being prepared, and the status of the previous EIS or ROD.
- Clearly state changes in the setting, circumstance, or design and compare such changes with the previous EIS.
- If the changes involve modifications to the purpose and need, clearly articulate these.
- Focus the analysis on new adverse impacts—including those with greater magnitude than discussed in the previous EIS—and significant adverse impacts.
- Briefly summarize unchanged impacts, incorporating the discussion in the previous EIS by reference.
- If needed, briefly summarize other project information and details or incorporate the discussion by reference to the previous EIS.

9.4 Amended FONSI or ROD

Generally, an amended decision document presents the supplemental analysis and includes all previous NEPA determinations for the project. The amended decision document must clearly distinguish between new decisions and previous determinations that have not changed. The decision document should also clearly state that prior limitation on claims notices included in the previous FONSI or ROD are not changed by the amended decision document, except as it pertains to the new information. In other words, the amended decision document does not open up the entire project for legal claims.

10 Environmental Commitments

Environmental commitments consist of those agreements made as part of an assurance to the community, stakeholders, and other entities that measures to address specific issues identified during the course of project development will be implemented at a future stage in the project. An example of a commitment may be a specific type of lighting fixture requested by the community or the removal and replacement of a fence associated with an agricultural property. Environmental commitments also include legally binding mitigation measures that are developed to address adverse effects on a specific resource and are developed in conjunction with the regulatory agency responsible for the resource. Examples of mitigation measures include wetland and stream mitigation.

As a project is developed, consideration should be given to environmental commitments to determine whether the commitment may be precedent-setting. The study team should discuss environmental commitments and properly vet them through the appropriate ADOT personnel prior to making the commitment. Once an environmental commitment has been fully vetted, it should be clearly documented and included in the project file. Tracking of these commitments is described in Section 10.2.

Environmental commitments, which are also mitigation measures required by regulation, are developed to minimize or mitigate the adverse effects that would result from a proposed action and are essential parts of the NEPA process. ADOT is required to identify and include in a proposed action all relevant and reasonable measures that it proposes to improve that action.

Effective mitigation begins early in the NEPA process, not at the end. Avoidance, minimization, and mitigation should be integral to the process of alternatives development and analysis. Some mitigation measures will be developed through consultation and coordination with resource agencies, the public, and others will be reasonable measures that ADOT determines are appropriate for the action.

NEPA requires a systematic approach to mitigation called *sequencing*. The sequencing of mitigation, as outlined in 40 CFR 1508.20, is as follows:

- *Avoiding* the impact altogether by not taking a certain action or parts of an action.
- *Minimizing* impacts by limiting the degree or magnitude of the action and its implementation.
- *Rectifying* the impact by repairing, rehabilitating, or restoring the affected environment.
- *Reducing* or *eliminating* the impact over time by preservation and maintenance operations during the life of the action.
- *Compensating* for the impact by replacing or providing substitute resources or environments.

ADOT must first consider avoidance of an impact and, if this is not possible, then it must attempt to minimize or reduce the impact, and so on, following the sequencing of mitigation.

10.1 Developing Mitigation Measures

Mitigation measures should be developed only to address adverse effects, regardless of whether the effect is significant or not. All other measures should be considered as avoidance and/or minimization. Note that standard specifications identified as part of permit requirements, permits needed for the project, and any items that are required—but not directly related to an adverse effect—are not considered mitigation. The impacts of the project are considered after incorporation of these required items.

Mitigation measures should be clearly written and identify who is responsible for implementing the mitigation, what is being performed as mitigation, and when it will be performed in the project lifecycle (for example, final design, construction). The mitigation must be enforceable (that is, biddable). ADOT maintains a list of mitigation measures for situations that utilize pre-approved mitigation measures.[17] Where appropriate, mitigation measures should be crafted as performance specifications so there is a means of verifying that the contractor has met the obligations in the measure.

Mitigation measures for all projects are developed in coordination with the ADOT EP technical staff and reviewed by the environmental planner leading the EA or EIS. The ADOT EP environmental planner submits the proposed mitigation measures to the ADOT project manager and the appropriate district engineer and district environmental coordinator for review and comment.

The ADOT District plays a key role in ensuring that mitigation measures and other environmental commitments are constructible. Some mitigation measures may require additional notification to ADOT departments. For example, a reseeding mitigation would require notification to the ADOT Roadside Development Section. Written approval of mitigation measures and other environmental commitments must be obtained from both the ADOT project manager and the district engineer prior to approving the NEPA document.

Mitigation measures and other environmental commitments that are developed for each resource (as necessary), are compiled into a single document and presented at the front of the EA or EIS. Once the NEPA approval is completed, the environmental planner sends the compiled mitigation measures and commitments to the ADOT Contracts and Specifications Section so that the mitigation measures and environmental commitments can be incorporated into the special provisions in the project's construction contract. Note that FHWA's mitigation policy states that in order for mitigation measures to be eligible for federal funding, the impacts must result from the proposed action and the proposed mitigation must be considered a reasonable expenditure of public funds [23 CFR 771.105(d)].

10.2 Tracking Commitments

Project-specific mitigation measures presented in an EA or EIS are included in the project [23 CFR 771.109(b) and 23 CFR 771.125(a)(1)] and should be tracked to ensure compliance. ADOT uses a number of methods to track project-specific mitigation measures, including performance specification and construction monitoring. ADOT

[17] https://www.azdot.gov/business/environmental-planning/guidance-for-federal-aid-projects/nepa-guidance

environmental planners also review the plans, specifications, and estimates (PS&E) for each project to verify that all required environmental commitments and project-specific mitigation measures are incorporated into the project.

The ADOT District resident engineer and/or the contractor are responsible for implementing particular project-specific mitigation measures, such as avoiding certain areas. However, other measures such as preconstruction species surveys and awareness training programs are implemented by ADOT EP-approved environmental consultants. The ADOT resident engineer is responsible for ensuring implementation of project-specific mitigation measures.

References

American Association of State Highway and Transportation Officials (AASHTO). 2008. *Using the SAFETEA-LU Environmental Review Process (23 U.S.C. 139)*. Practitioner's Handbook 9. January.

———. 2014. *Preparing High-Quality Environmental Documents for Transportation Projects*. Practitioner's Handbook 15. July.

———. 2016. *Defining the Purpose and Need and Determining the Range of Alternative for Transportation Projects*. Practitioners' Handbook 7. August.

Council on Environmental Quality (CEQ). 2011. *Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact*. January 14.

Federal Highway Administration (FHWA). 1987. "Guidance for Preparing and Processing Environmental and Section 4(f) Documents. FHWA Technical Advisory T 6640.8A." October 30, 1987. Accessed March 1, 2018. https://www.environment.fhwa.dot.gov/legislation/nepa/guidance_preparing_env_documents.aspx

———. 2015. *Red Book: Synchronizing Environmental Reviews for Transportation and Other Infrastructure Projects*.

———. 2018. "Environmental Review Process Checklist." Accessed December 3, 2018. https://www.environment.fhwa.dot.gov/legislation/authorizations/safetealu/reviewProcess_checklist.aspx

Federal Highway Administration (FHWA) and Federal Transit Administration. 2005. *Linking the Transportation Planning and NEPA Process*. February.

Appendix A. Contents of an EA and EIS

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