



## DESERT TORTOISE COUNCIL

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### Via email only

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Dear Mr. O'Brien,

Subject: Arizona Department of Transportation's Draft Application for Assumption of Federal Highway Administration's National Environmental Policy Act Responsibilities

The Desert Tortoise Council (Council) is a non-profit organization comprised of hundreds of professionals and laypersons who share a common concern for wild desert tortoises and a commitment to advancing the public's understanding of desert tortoise species. Established in 1975 to promote conservation of tortoises in the deserts of the southwestern United States and Mexico, the Council routinely provides information and other forms of assistance to individuals, organizations, and regulatory agencies on matters potentially affecting desert tortoises within their geographic ranges.

The Arizona Department of Transportation (ADOT) is applying to assume all of the Federal Highway Administration's (FHWA) project level responsibilities under the National Environmental Policy Act (NEPA) for state highway system projects (including Interstate highways, U.S. highways, and state routes) and Local Public Agency (LPA) projects that are not part of the state highway system in Arizona. ADOT is also applying to assume all of FHWA's responsibilities for environmental review, resource agency consultation, and other environmental regulatory compliance-related actions pertaining to the review or approval of projects in Arizona.

We appreciate this opportunity to provide comments on ADOT's above-referenced application and ask that you accept and consider those that follow. The purpose of our comments is to improve ADOT's application to FHWA by demonstrating ADOT's abilities to assume the complex world of complying with all applicable federal environmental laws, regulations, and executive orders especially with respect to the Agassiz's desert tortoise (*Gopherus agassizii* = Mojave desert tortoise) and Morafka's desert tortoise (*Gopherus morafkai* = Sonoran desert tortoise) and their habitats.

In the application, ADOT asserts, “based on ADOT’s current experience, expertise, and current level of involvement in consultations, its resources will continue to be adequate to assume FHWA’s responsibilities for resolving issues with external agencies.” We do not believe that ADOT should be content with being “adequate” in its assumption of FHWA responsibilities, and we do not believe that ADOT has demonstrated in its application that it has the experience, expertise, and resources to assume FHWA’s responsibilities. We believe that ADOT could demonstrate its competency to FHWA by implementing the suggestions and approaches in our comments that follow.

1. Construction versus Maintenance Projects: We are concerned that the application focuses on construction projects and provides little information on how ADOT would implement responsibilities for the maintenance or improvements of existing projects. We note that federally-funded maintenance or improvement projects require NEPA compliance and may require compliance with other federal environmental laws, regulations, and executive orders (directives). We suggest that ADOT clarify its use of the term “construction” as its intended use may include maintenance and improvements to existing roadways. One suggestion is to add information (e.g., a table) on the types of projects for which ADOT receives federal funding and the processes it would implement to ensure compliance with appropriate federal environmental laws, regulations, and executive orders. We want to ensure that as roadways are maintained or improved, ADOT will implement the federal environmental review process and include new information on the biology and status of the Mojave and Sonoran desert tortoises, their habitats, threats, mitigation (including improvements to mitigation measures), and other relevant factors to best contribute to recovery and conservation. Also, see comment #5.

2. Regulatory Compliance beyond NEPA: We note that the focus of ADOT’s application is NEPA in the NEPA Assignment Program with little discussion of compliance with other environmental laws, implementing regulations, and executive orders that are applicable under NEPA. We note that ADOT has signed Memoranda of Agreement and Memoranda of Understanding with federal agencies to clarify its proposed new role of coordination/consultation with these agencies. These agencies include the U.S. Fish and Wildlife Service (USFWS), and ADOT provides a brief discussion of informal and formal consultation. Given the threatened status of the Mojave desert tortoise under the federal Endangered Species Act (ESA), we believe ADOT should be clear in its application as to how it will comply with the ESA. To accomplish this, we request that ADOT provide additional information in its application regarding when and how it will seamlessly coordinate and consult with USFWS and other relevant federal agencies on project for which it has NEPA responsibilities. We suggest a flow chart as one method to provide this information to FHWA. In addition, ADOT may find it helpful to incorporate it into a working manual to inform new ADOT employees and ADOT employees new to NEPA and related environmental laws/regulatory processes to assist ADOT meeting its commitment to the NEPA Assignment Program, which includes other federal environmental directives (e.g., ESA).

3. NEPA Assignment Program Evaluations: “To ensure the success of the NEPA Assignment Program, ADOT will regularly conduct yearly self-assessment to gauge the effectiveness of its environmental procedures under the program and to identify the need for any program corrections. In addition, FHWA will audit ADOT annually for the first four years of the NEPA Assignment Program to ensure ADOT is meeting NEPA and other federal environmental

requirements consistent with FHWA's goals of environmental stewardship and streamlining." We request that ADOT include in its application how this will be accomplished. We believe that coordination with regulatory partners should be included in this process as a minimum, and we advise adding interested non-governmental organizations if ADOT's goal (or FHWA's goal) is transparency (as stated in the application). Please note that the Desert Tortoise Council is an interested non-governmental organization in this evaluation and coordination process.

4. Existing versus Future Environmental Laws, Regulations, and Executive Orders: "ADOT requests to assume all of FHWA's responsibilities for environmental review, interagency consultation, and other regulatory compliance-related actions pertaining to the review or approval of projects for which ADOT is requesting assumption of responsibilities under NEPA. ADOT requests to assume these responsibilities under all applicable federal environmental laws and Executive Orders including, but not limited to, federal laws, regulations, and Executive Orders listed in Appendix A of 23 C.F.R. § 773..." Please note that future environmental laws, regulations, and executive orders would also apply. There should be specific language in the application that recognizes the likelihood of future federal environmental directives and includes the adoption and implementation of these applicable directives when adopted by the federal government. If ADOT is unable or unwilling to make this commitment regarding the implementation of future applicable federal environmental laws, regulations, and executive orders, then language that excludes future environmental directives should be included in the application with language that makes it clear that FHWA will be responsible for implementation of future federal environmental directives.

5. Planning, Constructing, and Operating versus Maintaining: "ADOT is the legally authorized transportation department for the State of Arizona with responsibility for planning, constructing, and operating a complex highway system in addition to building and maintaining bridges and the Grand Canyon Airport." Please add that ADOT has responsibility for maintaining (i.e., maintenance projects) this highway system and decommissioning parts of it when deemed appropriate. Please see comment #1.

6. Governor-appointed Director and Board: "ADOT is led by the Director, who is appointed by the Governor.... An independent seven-member State Transportation Board is the primary policy-making and governing body for ADOT.... The seven members are appointed by the Governor." We suggest changing "independent" to "separate" as both entities are appointed by and answer to the Governor. This arrangement does not give the appearance of the Director and the Board acting independently.

7. Centralized Review and Approval of Environmental Documents: "All approvals of environmental documents are made by staff in the Central Office in Phoenix." We consider this centralized organization as playing a key part in ensuring consistency in the consideration of biological resources such as the Mojave desert tortoise and Sonoran desert tortoise and implementation of appropriate mitigation and conservation actions to contribute to recovery and conservation of the Mojave and Sonoran desert tortoises and their habitats.

For the federally threatened Mojave desert tortoise, legal requirements include that federal agencies comply with section 7(a)(1) of the ESA by consulting with the Secretary (USFWS) on how to utilize their authorities in furtherance of the purposes of the ESA by carrying out programs for the conservation of endangered species and threatened species. Thus, FHWA is obligated to consult with the USFWS (see comment #15 below) to contribute to recovery of listed species including the Mojave desert tortoise. In addition, FHWA is obligated to comply with 50 CFR 402, which describes the informal and formal consultation processes, including implementation of reasonable and prudent measures, terms and conditions, and conservation recommendations in biological opinions issued by the USFWS.

Regulatory requirements for the Sonoran desert tortoise are contained in the Candidate Conservation Agreement with the USFWS (USFWS et al. 2015). Its purpose is to ensure the long-term conservation of the Sonoran desert tortoise. When the conservation actions in this Agreement are implemented effectively, this should preclude the need to list the Sonoran desert tortoise under the ESA.

We urge ADOT to implement both mitigation measures to offset impacts and recovery/conservation measures to improve the population status and habitats of these two desert tortoise species.

Consistency is also important in complying with the federal Administrative Procedures Act.

8. Timing of Environmental Planning's Participation in Project Development: "The EP [Environmental Planning] staff provides the expertise required to meet the responsibilities to be assumed under the NEPA Assignment Program." While Environmental Planning staff may possess the expertise, is ADOT structured such as that Environmental Planning staff is involved when a transportation need is first identified? According to NEPA implementing regulations 40 CFR 1501.2, "Agencies shall integrate the NEPA process with other planning at the earliest possible time to insure that planning and decisions reflect environmental values, to avoid delays later in the process, and to head off potential conflicts." 40 CFR 1502.14(a) further directs federal agencies to "Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated" and to "Include reasonable alternatives not within the jurisdiction of the lead agency (40 CFR1502.14(c))." 40 CFR 1506.1(a)(2) instructs federal agencies that "Until an agency issues a record of decision no action concerning the proposal shall be taken which would: (1) Have an adverse environmental impact; or (2) Limit the choice of reasonable alternatives."

We request that ADOT amend its application to include clear information on how it would comply with these and other relevant sections of NEPA's implementing regulations given its current organization and operation among ADOT's divisions. We suggest that an appropriate location for such information would be the section on "Changes to be made for assumption of responsibilities, Organization and Procedures under the NEPA Assignment Program." While this section contains language that says ADOT "will use ... to-be-developed policies, procedures, and guidance to implement the NEPA Assignment Program," we are identifying an area where policies and procedures need to be developed now to comply with the implementation of NEPA and its regulations and to demonstrate to FHWA and the public that ADOT has appropriate policies, procedures, and guidance in place and has implemented appropriate training for all its planning, design, construction, and maintenance employees (see Comment # 16 below).

Because many transportation projects take years to design, it is imperative that Environmental Planning be involved from the conceptual stage of each project idea (e.g., Purpose and Need) to the completion of the NEPA document and implementation of mitigation. This approach ensures that 1) all alternatives are explored, 2) viable ones move forward so that NEPA compliance is assured, and 3) projects are not halted because of failure to comply with environmental laws and regulations during pre-planning and planning. Sometimes state transportation agencies develop projects and the select route, then request environmental compliance documents to justify the type of project and location. Under the “Approach to Environmental Document Preparation” section, the application alludes to this process by stating, “a planning or feasibility study is conducted and will identify, with the assistance of ADOT EP, whether funds for an EA or EIS need to be programmed.” This section does not mention whether EP is participating in the planning or feasibility study or whether resource categories that affect the human environment will be included in the planning or feasibility study. 40 CFR 1502.5 states that the NEPA document “shall be prepared early enough so that it can serve practically as an important contribution to the decision-making process and will not be used to rationalize or justify decisions already made.

Later in this application is one sentence that says, “Through EP’s [Environmental Planning] coordination with the MPD [Multi-modal Planning] and IDO [Infrastructure Delivery and Operations], ADOT employs a multi-phased project development process that integrates environmental requirements with planning and engineering design.” However, we are unclear as to when Environmental Planning’s involvement begins, how it occurs, and with what frequency it occurs from pre-planning through project completion. If it does not begin at the pre-planning stage, then this approach would violate NEPA as CEQ 40 CFR 1500.2(e) states that federal agencies shall “Use the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment.”

We were unable to tell from the description of ADOT’s organization and the organization chart, if NEPA planners and Environmental Planning’s specialized staff (e.g., biologists) are integrated into the operation of ADOT’s Divisions of Infrastructure Delivery and Operations, Multi-modal Planning, Transportation System Management and Operations, and Major Projects Alternative Delivery that are under the Deputy Director of Transportation/State Engineer. Please provide additional information to show how ADOT will comply with these and other relevant section of NEPA’s implementing regulations.

9. Scoping for Projects Identified for Categorical Exclusion: We commend ADOT on its Guidelines for Agency and Public Scoping for Projects with Categorical Exclusions (2018) and request to be included in the list of Scoping Contacts for proposed project that occur within the range of the Mojave desert tortoise or the Sonoran desert tortoise.

10. Mitigation beyond Construction Periods: The “Environmental Commitments” subsection under “Approach to Environmental Document Preparation” mentions the “Resident Engineers with assistance from District Environmental Coordinators (DECs), and from Environmental Planning staff as necessary, ensure the environmental commitments are implemented during construction.” Sometimes environmental commitments are implemented during maintenance projects or are ongoing (e.g., maintenance of tortoise exclusion fencing). Please ensure that maintenance projects and maintenance activities are included in the implementation of environmental commitments including mitigation.

11. NEPA Resource Categories: In several areas of the application, ADOT mentions specific resource categories “such as: air quality, biology, cultural resources, hazardous materials, noise analysis, and water resources.” We presume that these are the most common resource categories affected by FHWA/ADOT projects, and other resource categories, such as soils, climate change, and recreation, would be analyzed when applicable. We suggest that ADOT add language to its application that clarifies its inclusion and analysis of other resource categories in NEPA documents so it is clear and not presumed.

12. Mitigation and Adaptive Management: We are unsure of ADOTs commitment to develop and implement appropriate mitigation as defined in 40 CFR 1508.20. It appears from ADOT’s list of Commonly Used Mitigation Measures (<https://www.azdot.gov/docs/default-source/epgm--nepa-process-guidance-manual/mitigation-061217.pdf?sfvrsn=18> ), that for biological resources, ADOT does not compensate for the degradation or loss of biological resources, and its other mitigation measures temporarily avoid or minimize adverse impacts. Thus, residual and long term impacts remain for the uses three of the five forms of mitigation in 40 CFR 1508.20 for wildlife and one for the Sonoran desert tortoise.

In addition, we found no commitment in the application to implement adaptive management to ensure that the mitigation was implemented effectively, no mention of qualifications and approaches to analyze cumulative impacts, and no discussion of developing /implementing mitigation for cumulative impacts (our specific concern being the Mojave desert tortoise and Sonoran desert tortoise and their habitats). These are key regulatory requirements that federal agencies often find themselves deficient in when challenged in federal court. We suggest that ADOT strengthen its discussion on how it is qualified or will become qualified to implement successfully these areas of NEPA’s implementing regulations.

Because of these deficiencies, we are not sure that ADOT understands fully the meaning of mitigation as defined by the Council on Environmental Quality’s regulations. In 40 CFR 1508.20, mitigation "includes:

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

In ADOT’s application, it uses the terms “Avoid/Minimize/Mitigate of resources” (p.30). “Avoid” and “minimize” are forms of mitigation. Thus, this line should say Avoid/Minimize/other forms of Mitigation.” The Council is concerned that ADOT’s absence of experience in describing the federal regulatory definition of mitigation and practice of implementing a few forms of mitigation would continue in the future. Thus, we request that the application be amended to include language of ADOT’s commitment to implement all forms of mitigation regarding adverse impacts to biological resources, and specifically those affecting the Mojave and Sonoran desert tortoises and their habitats.

In reviewing ADOT's Commonly Used Mitigation Measures, we note that there is one mitigation measure for the Sonoran Desert tortoise (a handling protocol) but no mitigation measures for the federally threatened Mojave desert tortoise. We request that you add appropriate mitigation measures to this list. To assist ADOT with this, the Council has developed "A Compilation of Frequently Implemented Best Management Practices to Protect Mojave Desert Tortoise during Implementation of Federal Actions" (DTC 2017) ([http://www.deserttortoise.org/BMP\\_factsheets/dtc\\_construction\\_BMPs\\_090517.pdf](http://www.deserttortoise.org/BMP_factsheets/dtc_construction_BMPs_090517.pdf)). Many of these measures would apply to the Sonoran desert tortoise.

One mitigation measure that should be implemented by ADOT is tortoise exclusion fencing along roadway and roadway-related facilities. We request that ADOT add to its Commonly Used Mitigation Measures the installation and maintenance of desert tortoise exclusion fencing along roadways and developments associated with FHWA/ADOT road improvements (e.g., rest areas, weigh stations, etc.) when these projects occur in desert tortoise habitat or in habitats that serve as linkages between desert tortoise populations. In addition, to facilitate safe passage from one side of a roadway to the other thereby minimizing mortality from vehicles and human collecting, the design, construction, and maintenance of culverts and bridges should be implemented to accommodate all sizes classes of desert tortoises.

Given the documented adverse effects of the road effect zone for wildlife species, especially those with certain behaviors or characteristics that include the Mojave and Sonoran desert tortoises (Boarman and Sazaki 2006, Brocke et al. 1988, Carr and Fahrig, 2001, Forman *et al.* 1997, (Forman 2002, as cited in van der Ree et al. 2011, Gibbs and Shriver, 2002, Gucinski et al. 2001, Jaeger 2002, Jaeger et al. 2005a, 2005b, Jalkotzy et al. 1997, Karraker and Gibbs, 2011, Lovich and Bainbridge 1999, Nafus et al. 2013, Noss 1993, Roedenbeck et al. 2007, Rytwinski and Fahrig, 2011, 2012, van der Ree et al. 2011, and Von Seckendorff Hoff and Marlow 2002), the Council strongly urges ADOT to add tortoise exclusion fencing and safe passages under roadways as a common and standard mitigation measure that is implemented and maintained for all roadway construction, maintenance, and improvement projects with a federal nexus that occur in habitats and linkages between populations.

This request is supported by ADOT's participation in the Candidate Conservation Agreement for the Sonoran Desert Tortoise (USFWS et al. 2015) in which ADOT has 1) committed to partner with Arizona Game and Fish Department and other partners to facilitate development of conservation approaches and research related to *increasing road permeability* for the Sonoran desert tortoise; 2) coordinate and partner with State and Federal agencies and other interested parties to *incorporate project design features where warranted to minimize Sonoran desert tortoise habitat fragmentation*; and 3) coordinate and partner with State and Federal agencies and other interested parties to incorporate project design features where warranted *to minimize Sonoran desert tortoise vehicle strikes*.

A second commonly used mitigation measure that ADOT should add to its list of Commonly Used Mitigation Measures is that ADOT compensates for occupied and unoccupied habitats of the Mojave and Sonoran desert tortoises and linkage habitats between tortoise populations that is degraded or lost from implementation of the proposed projects. We urge ADOT to secure compensation lands with a conservation easement in perpetuity and funded for their long-term management to comply with 40 CFR 1508.20.

We presume that as a participating agency in the Candidate Conservation Agreement for the Sonoran desert tortoise (USFWS et al. 2015), it is ADOT's intent, through its actions, to help ensure that the Sonoran desert tortoise is conserved in Arizona, and that its population status improves so there is no need to list it under the federal Endangered Species Act in the future. As such, we applaud ADOT for its proactive approach to contributing to the conservation of this species and request that ADOT's contributions include proactive measures such as constructing and maintaining exclusion fencing for desert tortoises now rather than waiting until population numbers decline.

13. Quality Assurance/Quality Control: ADOT mentions in their application a QA/QC Plan and that a Procedures Manual "... will be completed and in place at the time the NEPA Assignment MOU becomes effective" (p. 27). The application contains links to other referenced documents but we did not find documents on how ADOT will implement its new responsibilities under the NEPA Assignment Program. The application refers to a Document Review Form and CE QA/QC Form and says that these existing forms will be similar for the new QC review in the QA/QC Plan, but we were unable to find these forms in the application. The QA/QC Plan and Procedures Manual are an integral part of the application as they demonstrate the criteria, standards, and process ADOT would implement under the NEPA Assignment Program. We request that ADOT make draft copies of these two documents available for public review prior to the effective date of the MOU.

14. Independent Environmental Decision Making: Under the Independent Environmental Decision-Making section (p. 30), ADOT says, "Under the NEPA Assignment Program, ADOT will assume the role of project level Environmental Decision-Maker with the full legal responsibility for that role, which is in addition to the traditional role of being the project sponsor. If ADOT is both the environmental decision-maker and the project sponsor, and the State Engineer supervises the Environmental Planning division, three engineering divisions (Infrastructure Delivery and Operations Division, Major Projects Division, and Multimodal Planning Division) (see organization chart on p. 8 of the Application), we are not sure how the environmental decision-making is considered independent. With this organization, there is the likelihood of unintentional pressure on the Environmental Planning Division to act according to the State Engineer's wishes or beliefs as he/she supervises all these divisions. To ensure independent decision making, Environmental Planning and associated resources should be its own branch and its supervisor should have status commensurate with the State Engineer.

15. Questions on Section 7 of the ESA: On page 32 of the Application, ADOT discusses its involvement with the USFWS and assuming responsibilities from FHWA for informal and formal consultation under section 7(a)(2) of the Endangered Species Act. "In addition, ADOT will continue to work collaboratively with USFWS to develop conservation strategies to ensure that projects will not jeopardize the continued existence of any endangered species or result in the destruction or adverse modification of critical habitat or essential fish habitat." However, we found no mention of whether FHWA would delegate section 7(a)(1) responsibilities to ADOT and if ADOT would accept them. To conserve or recover a species listed under the ESA, both sections 7(a)(1) and 7(a)(2) must be implemented. If only section 7(a)(2) is implemented, the listed species will continue to decline as this process only requires that adverse effects be minimized, and the eventual result will be a jeopardy opinion or extinction. Given the Council's interest in the conservation/recovery of the threatened Mojave desert tortoise and conservation of the Sonoran desert tortoise, we request that ADOT provide information in the application that clarifies if ADOT or FHWA will be responsible for implementation of section 7(a)(1) of the Endangered Species Act.



16. Training to Implement the NEPA Assignment Program: The application has a section on “Training to Implement the NEPA Assignment Program.” While ADOT mentions some courses that staff has recently completed, we note that it takes many years to become experienced in the implementation of NEPA. The same statement can be made of the Endangered Species Act, Clean Water Act, and other federal environmental regulations. We presume and that for the next few years ADOT will rely on the expertise of and consult with the FHWA, USFWS, USEPA, and other federal agencies until it becomes experience in implementing NEPA and other federal environmental regulations and we encourage ADOT to do this.

For training on the Mojave and Sonoran desert tortoises, we refer ADOT to the Council’s website <http://www.deserttortoise.org/training.html>. Currently the Council offers three courses, an introduction to desert tortoises and field techniques, an authorized biologist course, and a health assessment course. We are developing a desert tortoise handling course. The Council developed/is developing these courses in coordination with the USFWS. ADOT may want its employees or consultants to participate in these courses.

We appreciate this opportunity to provide input and trust that our comments will help ADOT with its application for implementation of ADOT’s NEPA responsibilities, and will help ADOT with the implementation of processes and procedures to conserve Mojave and Sonoran desert tortoises and their habitats in Arizona. Herein, we ask that the Desert Tortoise Council be identified as an Affected Interest for this and all other ADOT NEPA projects that may affect species of desert tortoises, and that any subsequent environmental documentation for NEPA projects is provided to us at the contact information listed above. We also ask that ADOT consider the Council as an interested party to incorporate project design features to minimize Sonoran desert tortoise habitat fragmentation and to minimize Sonoran desert tortoise vehicle strikes and other forms of mortality directly or indirectly caused by roadway construction, use, or associated projects (e.g., rest areas, weigh station, etc.).

Regards,



Edward L. LaRue, Jr., M.S.  
Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson

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