

July 10, 2012

Elisabeth A. Shumaker
Clerk of Court

PUBLISH

UNITED STATES COURT OF APPEALS
TENTH CIRCUIT

PRAIRIE BAND POTTAWATOMIE
NATION, SIERRA CLUB,
WETLANDS PRESERVATION
ORGANIZATION, JAYHAWK
AUDUBON SOCIETY, SAVE THE
WAKARUSA WETLANDS, INC.,
KANSAS UNIVERSITY ENVIRONS,
and ECOJUSTICE,

Plaintiffs - Appellants,

v.

No. 11-3000

FEDERAL HIGHWAY
ADMINISTRATION, J. MICHAEL
BOWER, in his official capacity as
Division Administrator, Federal
Highway Administration; KANSAS
DEPARTMENT OF
TRANSPORTATION,

Defendants - Appellees.

APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF KANSAS
(D.C. NO.08-CV-02534-KHV-DJW)

David Prager III (Robert V. Eye with him on the briefs) Kauffman & Eye,
Topeka, Kansas, for Appellants.

Eldon Shields, Gates, Shields & Ferguson, P.A., Overland Park, Kansas, for
Appellee Kansas Department of Transportation.

Ellen J. Durkee, Environmental & Natural Resources Division (Ignacia S. Moreno, Assistant Attorney General, and Maureen Rudolph, Attorney, Environmental & Natural Resources Division, and Barry R. Grisson, United States Attorney, and Jackie A. Rapstine, Assistant United States Attorney, District of Kansas) United States Department of Justice, Washington, DC, for Appellees J. Michael Bower and Federal Highway Administration.

Before **LUCERO, SEYMOUR**, and **TYMKOVICH**, Circuit Judges.

TYMKOVICH, Circuit Judge.

The Plaintiffs-Appellants challenge the Federal Highway Administration’s selection of a route for the South Lawrence Trafficway, a proposed highway project in the city of Lawrence, Kansas. Appellants claim two aspects of the Highway Administration’s decision render it arbitrary and capricious under the Administrative Procedure Act. First, Appellants claim the environmental impact statement supporting the decision runs afoul of the National Environmental Policy Act and Department of Transportation noise analysis regulations. Second, Appellants claim the Highway Administration’s analysis under the section of the Department of Transportation Act that protects historic sites, including property associated with Haskell Indian Nations University, improperly concluded there was no “feasible and prudent alternative” to the selected route.

Finding no fatal flaws in the environmental impact statement or the prudence analysis, we AFFIRM the judgment of the district court.

I. Background

For over two decades, the citizens of Lawrence, Kansas and other interested parties have debated the merits of the South Lawrence Trafficway (SLT), a highway project designed to link state highway K-10 and Interstate 70 around the southern periphery of Lawrence. The SLT would allow traffic to bypass surface streets running through busy south Lawrence, thereby relieving traffic congestion and improving motorist safety. A western segment of the SLT was built many years ago, but the remaining portion has been stalled.

The Appellants are a diverse collection of interested entities including the Prairie Band Pottawatomie Nation, the Sierra Club, the Wetlands Preservation Organization, the Jayhawk Audubon Society, Save the Wakarusa Wetlands, Inc., the Kansas University Environs, and Ecojustice. They seek to prevent injury to environmental, cultural, and historical values that may be affected by the SLT.

The Defendants-Appellees include the Federal Highway Administration (FHWA), the Kansas Department of Transportation (KDOT), and the official heads of those agencies. Another government entity, the United States Army Corps of Engineers, was involved in several aspects of the approval but was not a named defendant. Because the specific identities of these government bodies are not significant for the purposes of the legal challenges brought here, we will refer to them collectively as “the government.”

The route of the SLT is near several historical and environmental features. The Wakarusa River floodplain lies directly south of Lawrence. One potential route for the highway skirts the northern edge of the floodplain. This route would pass directly through the Haskell Agricultural Farm Property, a historic site eligible for listing on the National Register of Historic Places. The Haskell Farm was historically used for agricultural-education purposes by the Haskell Indian Nations University. The northern portion of the Haskell Farm, called the Upper Fields, contains several historic and cultural features, while the southern portion, called the Baker Wetlands, is an environmentally-sensitive area within the floodplain supporting various plant and animal life. The Upper Fields and Baker Wetlands are currently separated by a surface street, 31st Street.

A less direct route for the SLT along the southern edge of the Wakarusa floodplain, further away from Lawrence, would avoid directly affecting the Haskell Farm. It would, however, cost more to build due to increased length and the need to bridge the floodplain and river. It would also require motorists to drive a more circuitous route.

In selecting a route for the SLT, the government engaged in a multi-step evaluation process. Starting with an initial list of 27 identified options, the government selected 12 for detailed analysis. The government considered several factors, including encroachment on wetlands, increased noise on the Haskell

Farm, cost, and the extent to which each alternative achieved the project's goals of traffic congestion relief and increased safety.

After additional analysis, the government selected two finalists—the 32nd Street Alignment B Alternative (32B), and the 42nd Street Alignment A Alternative (42A)—plus a required “no action” alternative as a point of comparison. Alternative 32B took a direct route through the Haskell Farm, but incorporated mitigation measures to lessen the impact on the Farm, which included sound barriers and the relocation of 31st Street and other nearby surface roads. Alternative 42A took a longer route south of the floodplain, avoiding the Farm.

The government ultimately selected alternative 32B, and issued its preliminary decision in a draft environmental impact statement (EIS). After a public notice-and-comment period, the government issued a final EIS and record of decision formally adopting Alternative 32B. The government determined that 42A was not a prudent alternative due to several factors that cumulatively amounted to a problem of extraordinary magnitude.

After the government issued its final decision, Appellants proposed an additional alternative, which they dubbed “42C.” Alternative 42C resembled a route along the 42nd Street alignment that the government had eliminated at a relatively early stage in the evaluation process. Appellants presented their own analysis showing that 42C would achieve a significant cost benefit over 42A, and

urged the government to reconsider its decision. Despite having already issued a final EIS, the government considered and rejected 42C, explaining that sharp curves in the route rendered it unacceptable from a safety standpoint.

Appellants then challenged the government's decision in the court below, bringing claims under the Administrative Procedure Act (APA), the National Environmental Policy Act (NEPA), and section 4(f) of the Department of Transportation Act. The district court rejected all of Appellants' claims, and Appellants appealed.

II. Environmental Impact Statement Challenge

Appellants first claim the government's adoption of the EIS did not comply with NEPA, and therefore was arbitrary and capricious. Appellants identify four flaws in the EIS: (1) the noise analysis failed to adhere to United States Department of Transportation regulations; (2) the government should not have rejected Alternative 42C; (3) the cost analysis underestimated the costs for 32B; and (4) the safety analysis used incorrect safety criteria.

Our review of the statutory and administrative claims is de novo:

We review NEPA claims under the APA independently, giving no particular deference to the district court's review of an agency action. As with other challenges arising under the APA, we review an agency's NEPA compliance to see whether it is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. In the context of a NEPA challenge, an agency's decision is arbitrary and capricious if the agency (1) entirely failed to consider an important aspect of the problem, (2) offered an explanation for its decision that runs counter to the evidence before the agency, or is so

implausible that it could not be ascribed to a difference in view or the product of agency expertise, (3) failed to base its decision on consideration of the relevant factors, or (4) made a clear error of judgment.

Forest Guardians v. U.S. Fish & Wildlife Serv., 611 F.3d 692, 710–11 (10th Cir. 2010).

“Deficiencies in an EIS that are mere ‘flyspecks’ and do not defeat NEPA’s goals of informed decisionmaking and informed public comment will not lead to reversal.” *New Mexico ex rel. Richardson v. BLM*, 565 F.3d 683, 704 (10th Cir. 2009). Furthermore, even if an agency violates the APA, its error does not require reversal unless a plaintiff demonstrates prejudice resulting from the error. APA § 706 (“[D]ue account shall be taken of the rule of prejudicial error.”); see *New Mexico ex rel. Richardson*, 565 F.3d at 708. Importantly, “[a] presumption of validity attaches to the agency action and the burden of proof rests with the appellants who challenge such action.” *New Mexico ex rel. Richardson*, 565 F.3d at 704.

With this standard of review in mind, we turn to the four EIS deficiencies claimed by the Appellants.

A. Noise Analysis

1. Legal Framework

Federal law requires the Secretary of Transportation to “develop and promulgate standards for highway noise levels compatible with different land uses.” 23 U.S.C. § 109(i). This requirement is implemented by federal regulations establishing a three-stage noise analysis process that FHWA must follow for new highway projects. *See* 23 C.F.R. § 772.

First, FHWA must determine whether a proposed project will result in “traffic noise impacts.” § 772.11(a). “Traffic noise impacts” are defined as noise levels that approach or exceed a defined limit listed in the regulations, or that create a substantial noise increase over existing noise levels. *See* § 772.5; tbl. 1. The defined limit varies depending on the land use; for example, hotels and offices have higher limits than residential areas. *See id.* To determine whether traffic noise impacts will occur requires FHWA to determine existing noise levels, predict future noise levels for each alternative under consideration, and compare the existing and predicted noise levels.¹ *See* § 772.11.

Second, if FHWA determines that a project will create traffic noise impacts, “noise abatement shall be considered and evaluated for feasibility and

¹ Specifically, the regulations state: “The highway agency shall determine and analyze expected traffic noise impacts. . . . For projects on existing alignments, predict existing and design year traffic noise impacts.” § 772.11(a). “The analysis of traffic noise impacts shall . . . validate predicted noise level [sic] through comparison between measured and predicted levels.” § 772.11(d).

reasonableness.” § 772.13(a). Before adopting a record of decision, FHWA must identify and document “(1) Noise abatement measures which are feasible and reasonable, and which are likely to be incorporated in the project; and (2) Noise impacts for which no noise abatement measures are feasible and reasonable.” § 772.13(g).

Third, FHWA may not “approve project plans and specifications unless feasible and reasonable noise abatement measures are incorporated into the plans and specifications.” § 772.13(h). The final approval of plans and specifications is a separate decision from the adoption of a record of decision and, in this case, has not yet occurred.

2. Relevant Facts

The EIS includes the results of a noise impact analysis conducted by a government contractor. The contractor first measured existing noise levels at various points on the Haskell Farm and surrounding areas. The contractor then used computer modeling to forecast what noise levels would be in the year 2025 for each alternative with and without mitigating sound barriers, using 2025 vehicle traffic projections provided by KDOT. The results showed that Alternative 32B had a very significant impact on noise levels on the Haskell Farm without mitigation measures. But when sound barriers were included in the modeling, 32B had less noise impact than the “no action” and 42A alternatives, because those alternatives involved increased traffic on existing surface streets.

The parties dispute whether the EIS adequately compared future noise levels to existing levels. Appellants point to a sentence in the government's Traffic Noise Analysis Summary that suggests a comparison was not made, and a direct comparison of existing and predicted noise levels does not appear in the body of that document, in the EIS, or in the 4(f) analysis. The government, however, points to some data tables in the record that it claims include the relevant comparison. The record is somewhat unclear as to whether these data constitute a full or only partial comparison of existing and predicted noise levels, and whether the government actually "validate[d] predicted noise level [sic] through comparison between measured and predicted levels" as required. § 772.11(d).

3. Discussion

Even assuming the government's analysis did not adequately compare existing and predicted noise levels, any error was harmless. The effect of the first stage of a § 772 analysis is only to determine whether there will be noise impacts. If there will be noise impacts, then the government is required to proceed to stage two and consider noise abatement measures. Here, the government in fact found there would be noise impacts, and continued to stage two. At stage two, the government conducted the correct analysis; that is, it identified "[n]oise abatement measures which are feasible and reasonable, and which are likely to be incorporated in the project." § 772.13(g). Because any error at stage one did not

actually prevent the government from proceeding to stage two, and because the analysis at stage two was conducted correctly, we see no possible harm.

The Appellants argue unpersuasively that we should not engage in a harmlessness analysis where the claim of error is procedural. Appellants are correct that, in some instances, a harmlessness analysis can be inappropriate. For example, when an agency fails “substantively to consider the environmental ramifications of its actions in accordance with NEPA,” *Catron County Bd. of Comm’rs v. U.S. Fish & Wildlife Serv.*, 75 F.3d 1429, 1433 (10th Cir. 1996), we will not uphold the agency’s decision on the grounds that it *might* have made the same decision even without the error; otherwise, NEPA would be a near-toothless environmental safeguard.

Here, however, we know for a certainty that additional noise analysis could not have altered the outcome because, despite the potential flaw, the government determined there would be noise impacts and *correctly* proceeded to identify likely noise abatement measures. That is all the government was required to do at that point in the decisionmaking process, as it had not yet approved the project’s final “plans and specifications” at the third stage of the § 772 analysis. Thus, the Appellants cannot “show they were prejudiced” as required by APA § 706. *Bar MK Ranches v. Yuetter*, 994 F.2d 735, 740 (10th Cir. 1993).

Appellants also argue the error was material because the noise analysis was used not only for purposes of the § 772 analysis, but also played a role in

selecting 32B over the other alternatives. But, in weighing the relative merits of each alternative, the government did compare the predicted noise levels against each other. The error Appellants identify—failure to compare predicted noise levels to *existing* noise levels—would not have affected this relative comparison of the alternatives. Thus, any error was harmless.

Separately, Appellants claim the noise analysis was deficient in its geographic scope. Appellants briefly make this argument in very general terms in their opening brief, but only develop it in detail in their reply brief. Even there, Appellants cite no specific legal authority for the proposition that the government was required to consider a larger geographic area than it actually did.

“Setting the boundaries of the region to be analyzed involved technical and scientific judgments within the [government’s] area of expertise.” *San Juan Citizens Alliance v. Stiles*, 654 F.3d 1038, 1057 (10th Cir. 2011). The applicable regulations, quite apart from requiring a noise analysis along the entire length of the proposed project, specifically state that “a highway agency shall give primary consideration to exterior areas where frequent human use occurs.” 23 C.F.R. § 772.11. Additionally, the regulations specifically exempt “developed lands that are not sensitive to highway traffic noise,” § 772.11(c)(vi), and “undeveloped lands,” § 772.11(c)(vii), from noise impact analyses under most circumstances.

Here, the noise analysis focused on the sensitive areas in and around the Haskell Farm. As the government points out, most of the remaining land along

routes 32B and 42A is undeveloped. Appellants allege for the first time in their reply brief that the government “failed to consider 32B’s noise impacts on the nearby noise-sensitive Prairie Park and Nature Center and city homes east of the Haskell Farm.” Aplt. Reply Br. at 8. Appellants, however, have not laid a sufficient factual basis on the record for us to conclude that the government’s decision to restrict the noise analysis to the Haskell Farm was arbitrary and capricious. To the contrary, as far as the record shows, that decision, made pursuant to public comment on the project, was entirely reasonable. To find otherwise would be to engage in “flyspeck[ing]” the noise analysis based on factual allegations outside the record. *New Mexico ex rel. Richardson*, 565 F.3d at 704. This we may not do.

Accordingly, we find the government’s noise analysis did not violate the APA.

B. Alternative 42C

Next, Appellants claim the government erred by eliminating alternative 42C from consideration during the evaluation process and failing to reconsider this alternative at the Appellants’ request.

1. Legal Standards

Before commencing in-depth analyses of EIS alternatives, agencies engage in scoping—“an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action.”

40 C.F.R. § 1501.7. An agency need not “analyze the environmental consequences of alternatives it has in good faith rejected as too remote, speculative, or . . . impractical or ineffective.” *Colo. Envtl. Coal. v. Dombeck*, 185 F.3d 1162, 1174 (10th Cir. 1999) (quoting *All Indian Pueblo Council v. United States*, 975 F.2d 1437, 1444 (10th Cir. 1992)).

In reviewing an agency’s choice of which alternatives to eliminate at the scoping stage, we apply “[t]he rule of reason.” *Custer County Action Ass’n v. Garvey*, 256 F.3d 1024, 1040 (10th Cir. 2001) (quoting *Am. Rivers v. Fed. Energy Reg. Comm’n*, 201 F.3d 1186, 1200 (9th Cir. 2000)). We also bear in mind that “an agency need not consider an alternative unless it is significantly distinguishable from the alternatives already considered.” *New Mexico ex rel. Richardson*, 565 F.3d at 708–09.

2. Relevant Facts

At the earliest stage of project planning, the government developed five concept corridors for the SLT. One of these concept corridors was the 42nd Street corridor, which passed west of an S-curve in the Wakarusa River, at its narrowest point, and continued south of the floodplain.

During the scoping process, the government developed 12 potential alignments along the five concept corridors for detailed review. Two of the 12 remaining alignments were along the 42nd Street corridor: alternatives 42A and 42B. Although these two alternatives mostly followed the path of the 42nd Street

concept corridor, they passed east of the S-curve in the Wakarusa River instead of west.

The government admits that early in the scoping process it also considered an alternative along the 42nd Street alignment that would have passed west of the S-curve, but this alternative (along with several others) was eliminated due to safety concerns and thus was not included in the final 12. Later, the government narrowed the alternatives down to 32B and 42A, which were analyzed in further detail. Finally, the government selected 32B as its preferred alternative.

The details about the concept corridors and the 12 alternatives were disclosed in the draft EIS that the government issued in September 2002. Appellants participated in the public comment process, but at that time did not propose an alternate route along the 42nd Street corridor.

After the final EIS was released, the Appellants submitted a new alternative that they refer to as 42C. This alternative would cross the Wakarusa River west of the S-curve as envisioned by the original 42nd Street concept corridor. Appellants allege 42C would result in \$17 million in savings relative to 42A because it would use multiple short bridges instead of a single long bridge to cross the floodplain.

The government determined that the 42C alignment, as proposed by Appellants, encroached upon Lawrence park and public school properties, failed to provide a safe approach to bridges, and failed to properly align with the

proposed K-10 interchange. Nonetheless, the government developed a modified version of alternative 42C that remedied these problems.

The government then considered and rejected the modified route. In a letter to Appellants, the government explained that 42C “would increase traffic accident risks due to increased curvature of the road” and due to ramping up and down between the multiple bridges. App. at 1014. In addition, the government determined that the cost savings from 42C would be only about \$5 million, not the \$17 million Appellants claimed. Thus, alternative 42C would still be significantly more expensive than alternative 32B.

Appellants protested that the government’s modifications to alternative 42C were deliberately designed to sabotage the proposal. The government responded that it was “satisfied that the [modified] alignment . . . is reasonable and that it reflects appropriate roadway design.” App. at 976.

3. Discussion

The government did not act arbitrarily and capriciously in failing to include alternative 42C, or a similar route passing west of the S-curve, in the group of 12 alternatives selected for detailed consideration. At the start of a highway project like the SLT, there are numerous possible routes. By necessity, an agency must select a certain number of routes for serious study and eliminate the rest without detailed analysis. Thus, absent a showing of bad faith, we review an agency’s

selection of alternatives only for reasonableness. *See Custer County Action Ass’n*, 256 F.3d at 1040.

Here, the government did not act unreasonably or in bad faith in its selection of alternatives. The government selected alternatives 42A and 42B after conducting an “early and open” scoping process in conformity with NEPA-implementing regulations. 40 C.F.R. § 1501.7. Although alternatives 42A and 42B differed somewhat from the 42nd Street concept corridor, the very notion of a “concept” implies that some changes will be made as plans progress. Alternatives 42A and 42B did not differ significantly from the concept corridor in terms of basic function; all three went south around the floodplain, avoiding the Haskell Farm but requiring a longer route. Although the concept corridor may have been marginally less expensive, it was also more dangerous due to the road curvature required. Most significantly for NEPA purposes, there is no evidence that the concept corridor would have been significantly different than 42A and 42B in its environmental impact.

To the extent Appellants argue the government erred in not giving sufficient consideration to their 42C proposal, we note that Appellants did not propose alternative 42C until *after* the government issued its final EIS. Appellants do not explain why they did not propose this route during the scoping process or during the public comment period for the draft EIS. Despite Appellants’ late proposal, the government considered their proposal and offered a

reasoned explanation of why it was inferior to the chosen alternative. Appellants argue that the government's safety analysis for alternative 42C was inadequate, but given the timing of their proposal, the government arguably went above and beyond what was required.

The government's decision was not arbitrary and capricious. If Appellants intended a more robust review of alternative 42C's safety, they could have proposed that route before the EIS was finalized.

C. Alternative 32B Cost Analysis

Appellants next argue that the government significantly underestimated construction costs for alternative 32B.

This argument, based on a single footnote in the EIS, warrants only a brief discussion. The footnote in question relates to Table 2-18 of the EIS, which shows estimated construction, operation, and maintenance costs for the 32B, 42A, and no-action alternatives. One of the cost items listed is "mitigation." For alternative 32B, mitigation costs are listed at \$18.6 million, with a footnote call appended. The footnote reads: "Mitigation cost for [alternative 32B] includes relocation of 31st Street, Haskell Avenue and Louisiana Street, as well as noise walls and additional landscaping." App. at 551 n.11. Appellants interpret this footnote to mean that the \$18.6 million figure *only* includes the costs listed in the footnote, erroneously excluding an additional \$10 million in wetlands mitigation costs.

Although Appellants' interpretation is perhaps plausible when the footnote is read in isolation, it is obviously incorrect when read in conjunction with other sections of the EIS. Specifically, the portion of the EIS entitled Environmental Consequences has a subsection specifically addressing wetland mitigation for the 32nd Street corridor. There, a table totaling the costs for 32B includes wetland mitigation measures as well as other measures and lists the total cost as \$18.6 million. *See App.* at 665.

Thus, we are unconvinced that the government erroneously omitted wetlands mitigation costs from its consideration of alternative 32B.²

D. Safety Criteria

Finally, Appellants complain briefly that the EIS used the wrong vehicle accident rate metric to calculate the relative safety of each alternative. The EIS's purpose and need statement used accidents per million vehicle miles driven, but the EIS's safety analysis used accidents per year. The substantive difference between the two metrics is that accidents per million vehicle miles driven cancels out accident increases created solely by increased highway length, while accidents per year does not. Appellants claim the use of the latter metric in the safety analysis was erroneous given that the former metric was used to define the project's purpose and need.

² Although we find the government did not omit these costs from its NEPA analysis, the government admits that it did erroneously omit some costs from its section 4(f) analysis. We address this issue separately below.

We find the EIS's use of accidents per year instead of accidents per million vehicle miles was not arbitrary and capricious. We "are not in a position to decide the propriety of competing methodologies in the transportation analysis context, but instead, should determine simply whether the challenged method had a rational basis and took into consideration the relevant factors." *Comm. to Pres. Boomer Lake Park v. Dep't of Transp.*, 4 F.3d 1543, 1553 (10th Cir. 1993). Appellants do not explain why accidents per year lacks a rational basis for NEPA purposes. To us, the total number of accidents that will be caused (or avoided) each year appears a reasonable safety metric, and Appellants do not attempt to convince us otherwise.

We note that there is no inherent inconsistency in using accidents per year to evaluate safety, while also using accidents per million vehicle miles as a minimum standard under the purpose and need of the project. The two analyses actually served somewhat different purposes; the safety analysis accounted for accidents avoided due to decreased use of more-dangerous surface streets in Lawrence, while the purpose and need standard considered only the safety of the highway itself, which had to meet or exceed the state average for highways in Kansas. Significantly, Appellants do not claim that alternative 32B would actually fail to meet the purpose and need statement's minimum standard.

Thus, we reject Appellants' claim that the government failed to rigorously and objectively evaluate road safety.

* * *

In sum, the Appellants have failed to demonstrate that the EIS rendered the government's selection of Alternative 32B arbitrary and capricious.

III. Section 4(f) Challenge

Section 4(f) of the Department of Transportation Act prevents highway construction on or near historic properties unless the government determines that there is no feasible and prudent alternative. Appellants claim the government's determination that alternative 42A was not a prudent alternative was arbitrary and capricious.

A. Legal Framework

We review an agency's section 4(f) analysis *de novo* under the APA. Courts hearing a section 4(f) challenge generally engage in a three-step inquiry:

First, the reviewing court is required to decide whether the Secretary acted within the scope of his authority under § 4(f). In this initial inquiry, we must be able to find that the Secretary could have reasonably believed that in this case there are no feasible alternatives or that alternatives do involve unique problems.

* * *

Second, the court must decide whether the Secretary's ultimate decision was arbitrary, capricious, an abuse of discretion or otherwise not in accordance with law. This inquiry involves determining whether the [Secretary's] decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment.

* * *

Finally, the Supreme Court instructs reviewing courts to determine whether the Secretary's action followed the necessary procedural requirements.

Boomer Lake Park, 4 F.3d at 1549 (quoting *Citizens to Pres. Overton Park, Inc. v. Volpe*, 401 U.S. 402 (1971)).

Here, however, Appellants do not attack the government’s 4(f) analysis along all three fronts. Instead, Appellants argue that the government’s evaluation of several factors under section 4(f), and its ultimate conclusion that those factors in combination rendered alternative 42A imprudent, were arbitrary.³

Section 4(f) of the Department of Transportation Act enacts “the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.” 49 U.S.C. § 303(a). In furtherance of this policy, section 4(f) allows the Secretary of Transportation to approve a transportation project that requires the “use” of historic sites “only if . . . there is no prudent and feasible alternative to using that land; and . . . the program or project includes all possible planning to minimize harm to the . . . historic site resulting from the use.” § 303(c).

Section 4(f)’s implementing regulations translate this broad directive into specific agency guidance. The regulations define the term “use” to include both

³ Appellants do *not* argue that the government considered the *wrong* factors in reaching its decision (with the exception of one factor, the “net benefit” 32B provides to the Haskell Farm). Thus, we will assume any factors the government considered that are not explicitly listed in the relevant regulations are nonetheless appropriate under the catch-all category of “other unique problems or unusual factors.” 23 C.F.R. § 774.17.

physical disturbance and “constructive use.” 23 C.F.R. § 774.17. A constructive use can encompass significant noise level increases. *See* § 774.15(e)(1). Here, the parties agree that alternative 32B would result in a direct “use” of the Haskell Farm, while alternative 42A would not.

The regulations describe a “prudent avoidance alternative” as one that “avoids using Section 4(f) property and does not cause other severe problems of a magnitude that substantially outweighs the importance of protecting the Section 4(f) property.” § 774.17. The regulations also specify:

(3) An alternative is not prudent if:

(i) It compromises the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need;

(ii) It results in unacceptable safety or operational problems;

(iii) After reasonable mitigation, it still causes:

(A) Severe social, economic, or environmental impacts;

(B) Severe disruption to established communities;

(C) Severe disproportionate impacts to minority or low income populations; or

(D) Severe impacts to environmental resources protected under other Federal statutes;

(iv) It results in additional construction, maintenance, or operational costs of an extraordinary magnitude;

(v) It causes other unique problems or unusual factors; or

(vi) *It involves multiple factors in paragraphs (3)(i) through (3)(v) of this definition, that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.*

Id. (emphasis added). Here, the government relied on the cumulative impact of several different factors in finding that alternative 42A was imprudent.

The first major case examining section 4(f) was the landmark Supreme Court case *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402 (1971). While requiring a rigorous review of agency decisions, the Supreme Court recognized that such decisions are “entitled to a presumption of regularity,” *id.* at 415, and that reviewing courts are “not empowered to substitute [their] judgment for that of the agency,” *id.* at 417.

More recently, our circuit and others following *Overton Park* have emphasized the discretion agencies exercise in conducting 4(f) analyses, particularly in determining the prudence of alternatives. Our leading case is *Committee to Preserve Boomer Lake Park v. Department of Transportation*, 4 F.3d 1543 (10th Cir. 1993), in which we evaluated the application of the 4(f) factors to a highway proposal through a state park. In that case, the city of Stillwater, Oklahoma desired to build a new road to replace a one-lane bridge across Boomer Lake that previously had been demolished for safety reasons. *See id.* at 1547. The city’s preferred alternative was a four-lane causeway passing in a straight line over a southern portion of the lake. The avoidance alternative was

a four-lane surface road routed around the southern end of the lake, avoiding the use of parkland. *See id.* at 1548. FHWA found the avoidance alternative was imprudent based on the cumulative effect of several problems, including construction costs, user costs, increased traffic congestion, unsafe curves, a longer route, disruption to existing intersections, and increased residential and commercial relocations. *See id.* at 1550. FHWA also rejected the “no-action” alternative, finding it failed to meet the purpose and need of the project. As a result, FHWA approved the city’s preferred alternative.

In affirming FHWA’s 4(f) analysis, we recognized, “the Secretary acted within the scope of his authority and could reasonably have believed the alternatives involved unique problems which rendered them imprudent.” *Id.* Importantly, we recognized the legitimacy of imprudence determinations based on multiple factors. We found that “[a]lthough none of the[] factors alone is clearly sufficient justification to reject the alternatives in this case, their cumulative weight is sufficient to support the Secretary’s decision.” *Id.*; *see also Concerned Citizens Alliance, Inc. v. Slater*, 176 F.3d 686, 703 (3d Cir. 1999) (“[A]n accumulation of smaller problems that, standing alone, would not individually constitute unique problems may together comprise sufficient reason for rejecting an alternative as imprudent.”).

We also rejected the appellant’s argument that the Secretary erred in failing to evaluate a two-lane causeway alternative, noting that “the Secretary’s

obligation under § 4(f) is to examine enough alternatives ‘to permit a sound judgment that the study of additional [alternative routes] is not worthwhile,’” *Boomer Lake Park*, 4 F.3d at 1551 (alteration in original) (quoting *Eagle Found., Inc. v. Dole*, 813 F.2d 798, 807 (7th Cir. 1987)), and that the Secretary’s “decision concerning which alternatives to consider is necessarily bound by a rule of reason and practicality,” *id.* See also *Safeguarding the Historic Hanscom Area’s Irreplaceable Resources, Inc. v. F.A.A.*, 651 F.3d 202, 210–11 (1st Cir. 2011) (“This was a judgment call—and one that fell within the purview of the [agency’s] expertise.”). We recognized that “[w]e are instructed to conduct a careful and searching inquiry into the facts, but once we are satisfied the Secretary took a ‘hard look’ at the relevant factors, we are not to substitute our judgment for that of the agency.” *Boomer Lake Park*, 4 F.3d at 1551.

B. Discussion

The government found alternative 42A was imprudent based on the cumulative impact of the following seven factors: (1) 42A does not meet the purpose and need for the project as well as 32B; (2) 42A costs significantly more than 32B; (3) 42A has greater environmental and development-related impacts on the Wakarusa floodplain; (4) 42A would accelerate urban development south of the Wakarusa River; (5) 42A would have a greater overall impact on the Haskell Farm than 32B, due to the indirect impact of increased traffic near the Farm; (6) 42A has other negative environmental impacts; and (7) 32B, unlike 42A, results

in a “net benefit” to the Haskell Farm, due to the rerouting of a road that currently runs through the Farm and the installation of sound barriers.

Appellants argue the government’s analysis of each of these factors was arbitrary. Appellants also argue that the seventh factor—the “net benefit” to the Haskell Farm—was an impermissible factor for the government to consider under section 4(f).

1. Purpose and Need of the Project

The government determined that alternative 42A would not meet the project’s purpose and need as well as alternative 32B for two reasons. First, it would divert less traffic from Lawrence city streets due to its more circuitous route, and, second, it would result in more car accidents. Appellants dispute the government’s conclusion, citing their own calculation, based on data in the EIS, that 42A would relieve more total traffic than 32B. The government, however, explains that the relevant congestion relief measure is not total traffic reduction in Lawrence, but rather relief of east-west congestion along 23rd Street. On this measure, 32B better relieves congestion.

The government’s conclusion in this regard is reasonable and is entitled to deference. “Courts are not in a position to decide the propriety of competing methodologies in the transportation analysis context, but instead, should determine simply whether the challenged method had a rational basis and took into consideration the relevant factors.” *Boomer Lake Park*, 4 F.3d at 1553. The

government's method here did so. The record shows that east-west traffic through Lawrence is the primary congestion problem the SLT is meant to remedy, and that 23rd Street is currently the primary east-west route. Thus, it was reasonable for the government to use 23rd Street traffic levels to determine that 32B would meet the project's traffic-reduction goals better than 42A.

The government's conclusion that 42A would be more dangerous than 32B appears somewhat simplistic, but not fatally so. In calculating the accident levels for 32B and 42A, the government assumed an accident rate along both routes that conformed to the state average for four-lane highways. Thus, the higher number of total accidents projected for 42A is solely a result of its longer length relative to 32B. The government, however, argues that an increase in accidents caused solely by increased length is a legitimate factor to consider.

While we might quarrel with the methodology, we recognize that section 4(f) does not require every factor to be calculated with absolute precision. For example, in *Boomer Lake Park*, we approved FHWA's use of an "unsubstantiated dollar figure" for road-user costs because it was based on reasonable assumptions. *See Boomer Lake Park*, 4 F.3d at 1553. Despite the fact that "we f[ou]nd no substantiation" for the specific dollar figure calculated—a user cost increase of \$730,000 over the preferred alternative—we approved of the more general conclusion that the costs of the avoidance alternative "would be higher due to increases in the distance and time travelled, more curves and interchanges, and a

higher accident rate.” *Id.* Although this analysis was “not a model of clarity,” we found it “sufficiently adequate” in the context of an imprudence finding based on several cumulative factors. *Id.*

Similar to the user-cost analysis in *Boomer Lake Park*, the safety analysis here is based on the common-sense assumption that increases in time and distance traveled lead to more accidents. While the analysis here differs in that it did not incorporate additional common-sense factors such as curves, it has the significant compensating advantage that the accident increase is not “unsubstantiated,” but rather is grounded in specific calculations based on road length and state highway statistics. And while Appellants criticize the government’s analysis, they do not show that the calculations used were irrational or irrelevant; nor do they identify any significant differences between 32B and 42A, apart from length, that the government reasonably should have considered in its safety analysis.

Accordingly, on the current record, we will not disturb the government’s conclusion that 32B would fulfil the project’s safety-related goals better than 42A.

2. *Cost*

The government calculated that 42A would cost approximately \$19 million more than 32B. Cost is a proper consideration under section 4(f). *See* 42 C.F.R. § 774.17. Appellants allege, and the government admits, that the cost calculations for 32B erroneously omitted approximately \$8.5 million in wetlands

mitigation costs. The government, however, claims that this error was offset by another error which double-counted \$8 million in bridge costs for 32B, thereby creating a net error of only about \$500,000.

When “an agency relies on a number of findings, one or more of which are erroneous, we must reverse and remand only when there is a significant chance that but for the errors the agency might have reached a different result.” *Nat’l Parks & Conservation Ass’n v. F.A.A.*, 998 F.2d 1523, 1533 (10th Cir. 1993). Here, the errors resulted in a \$500,000 understatement of 32B’s costs. While a half million dollars is not a de minimis amount, it is highly unlikely that this amount would have changed the government’s decision in light of the \$19 million gap between 42A and 32B. Accordingly, we need not reject the cost analysis, despite its offsetting errors.

Appellants also argue the government erroneously eliminated 42C in its consideration of costs. As discussed earlier, however, the government did not err in rejecting 42C, and it was not an alternative the government was required to consider under section 4(f). Even if 42C had been considered as part of the 4(f) analysis, it still would have been approximately \$14 million more expensive than 32B.

3. Floodplain Impacts

Executive Order 11988 and its implementing regulations discourage highway construction and other development upon floodplains. The government

determined that 42A would have a greater impact upon the Wakarusa floodplain than would 32B. Appellants, however, claim that the government did not explain how 42A would actually impact the floodplain.

The purpose of Executive Order 11988 is “to avoid to the extent possible the long and short term adverse impacts associated with occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative.” Exec. Order No. 11988, 42 Fed. Reg. 26951 (May 24, 1977). The regulations implementing E.O. 11988 state that “[i]t is the policy of the FHWA . . . to avoid support of incompatible flood-plain development.” 23 C.F.R. § 650.103. The regulations distinguish between an “encroachment,” which includes any “action within the limits of the base flood plain,” and “significant encroachment,” which is defined as:

a highway encroachment and any direct support of likely base flood-plain development that would involve one or more of the following construction-or-flood-related impacts:

- (1) A significant potential for interruption or termination of a transportation facility which is needed for emergency vehicles or provides a community’s only evacuation route. [sic]
- (2) A significant risk, or
- (3) A significant adverse impact on natural and beneficial flood-plain values.

23 C.F.R. § 650.105(q). Significant encroachments may not be approved unless the government finds there is no “practicable alternative.” § 650.113(a). This

finding must be included in the EIS and state (1) “the reasons why the proposed action must be located in the flood plain,” (2) “the alternatives considered and why they were not practicable,” and (3) “a statement indicating whether the action conforms to applicable State or local flood-plain protection standards.” *Id.*

Here, the government analyzed two potentially significant encroachments: support of incompatible floodplain development, and adverse impacts on natural and beneficial floodplain values. The government determined that both 32B and 42A “have some potential to stimulate floodplain development.” App. at 660. The government found that the 42nd Street alignment had a higher potential to stimulate development than 32B. The record shows that the land north of the floodplain is urban, while the area to the south is rural and agricultural. 42A has the potential to stimulate residential and commercial construction south of the floodplain, thereby surrounding the floodplain with urban development, which could degrade its natural quality. This prediction is based on Lawrence city planning documents and on observed development that occurred after the construction of the western portion of the SLT. These findings appear to be reasonable, and Appellants do not offer evidence to the contrary.

The government’s finding regarding “natural and beneficial floodplain values,” while somewhat conclusory, appears to be reasonable. The government found 42A would degrade those values more than 32B because it would pass directly over the floodplain rather than skirting its northern edge. Appellants

protest that this fact is not material because 42A will feature bridges that lift the road above the floodplain. But the category of “natural and beneficial floodplain values” does not include risks directly related to flood levels; rather, it encompasses “fish, wildlife, plants, open space, natural beauty, scientific study, outdoor recreation, agriculture, aquaculture, forestry, natural moderation of floods, water quality maintenance, and groundwater recharge.” 23 C.F.R. § 650.105(i). The government reasonably determined that the presence of significant bridging directly across the floodplain, as well as the presence of significant activity during construction, had the potential to compromise these values.

Overall, the government’s floodplain analysis—bolstered, in particular, by its analysis of future urban development—does reasonably show that 42A would have a greater negative floodplain impact than 32B. Accordingly, the floodplain analysis supports the government’s determination that 42A would be imprudent.⁴

⁴ Appellants make much of the fact that alternative 32B would destroy 58 acres of wetlands, while 42A would only destroy 4.45 acres, making 42A the better choice as far as natural and beneficial floodplain values are concerned. As the government points out, however, the mitigation plan for 32B includes the net creation of 259 acres of wetlands, while 42A would result in only a net increase of 76 acres. In this context, it was reasonable for the government to consider the net creation of wetlands in its overall evaluation of floodplain values. And, in any event, the balancing of *competing* floodplain values pursuant to E.O. 11988 is clearly a task warranting a significant degree of deference to the expertise of the agency involved. *Cf. Greater Yellowstone Coal. v. Flowers*, 359 F.3d 1257, 1271 (10th Cir. 2004).

4. Accelerated Development South of the Wakarusa River

The government found that 42A, due to its southerly route, would hasten undesirable urban development south of the Wakarusa River. This conclusion relies on essentially the same reasoning as the just-discussed finding regarding undesirable development in the floodplain area, but is broader in scope since it includes non-floodplain areas as well. This conclusion is also based on the government's finding that accelerated development south of the river would stress city and county infrastructure and financial resources.

Appellants argue that the “effects of 42A on planned development are not an extraordinary problem but merely a normal one.” Aplt. Br. at 47. That is true so far as it goes, but misses the point. The government never claimed problems related to accelerated development were of an extraordinary magnitude; rather, it claimed accelerated development as one of the “individually minor” factors that “cumulatively cause unique problems or impacts of extraordinary magnitude.” 23 C.F.R. § 774.17; *see Boomer Lake Park*, 4 F.3d at 1550 (“A cumulation of small problems may add up to a sufficient reason to use § 4(f) lands.” (quoting *Hickory Neighborhood Def. League v. Skinner*, 910 F.2d 159, 163 (4th Cir. 1990))). Again, Appellants do not argue that accelerated urban development, in general, is an impermissible factor for the government to consider in its 4(f) analysis.

Appellants direct us to a 2006 letter from the Lawrence-Douglas County Metropolitan Planning Organization, claiming the letter undermines the

government's conclusion that 42A would accelerate development south of the river. But that letter makes no mention whatsoever of accelerated development south of the river, and in fact makes no mention of 42A at all. Rather, that letter advocates an entirely different solution to traffic congestion in Lawrence that involves linking K-10 and I-70 east of the city. As the letter has nothing to say regarding the problem of accelerated development south of the river, it neither bolsters nor calls into question the government's conclusions.

Appellants point to no other evidence showing that the government's conclusions regarding accelerated development were unreasonable. Accordingly, we will not remand on this ground.

5. Indirect Impacts on the Haskell Farm

The government calculated that 42A would have a greater negative impact on the affected properties than 32B when secondary and indirect impacts were considered. These secondary impacts included increased traffic on adjacent roads contributing to noise and the loss of the 32B mitigation area adjacent to the Haskell Farm, on which future urban development may occur if 42A were adopted. Appellants claim the government miscalculated these secondary impacts, and that the government arbitrarily failed to consider the impact 32B might have on the Haskell Farm's historic register eligibility.

With regard to noise-related secondary impacts, Appellants simply renew their attack on the government's noise analysis. For the same reasons discussed

above with regard to the NEPA analysis, the government's noise analysis was reasonable.

Appellants also attack the traffic calculations. First, Appellants claim the government arbitrarily omitted from its analysis traffic traveling directly on 32B. As the government explains, however, the impact from traffic on 32B would be mitigated by sound walls, which in turn would be masked by greenery. This reasonably accounts for both noise-related and visual effects of traffic traveling directly on 32B. The secondary impacts analysis quite reasonably focused on impacts that would not be mitigated.

Second, the government omitted a quarter-mile segment of Haskell Avenue between alternative 32B and 31st Street from its traffic analysis. The government admits the error, but explains that the additional traffic along this segment would have little, if any, negative impact because the 32B alternative calls for Haskell Avenue to be relocated 1,000 feet further away from the Haskell Farm. Appellants do not refute this explanation. Although they claim the increased traffic along this segment will result in "possible commercial development pressures" along this segment, Aplt. Br. at 51, we note that the relevant area around Haskell Avenue, as it would be relocated under 32B, is already a developed area. It would seem that, if anything, the relocation of Haskell Avenue would steer development further away from the affected properties. Moreover, the traffic along this segment was not omitted from the noise analysis. We find

the government's explanation reasonable in light of the record.

Finally, Appellants argue the government erred in not considering 32B's potential impact on the Haskell Farm's eligibility for registration as a historic site. The EIS, however, reveals that the government did, in fact, consider this factor. The government determined that 32B was unlikely to compromise the Haskell Farm's historic features because it did not disturb any of the particular historic structures that contribute to the Farm's eligibility. Appellants point to a letter from a National Park Service official expressing concern that "[t]he creation of any road through the wetlands or upper fields would represent a great impact on the historic character" of the Farm. App. at 1095. That letter, however, explicitly declined to offer any official view about the desirability of the alternatives. Moreover, a road already crosses the Farm at 31st Street. Alternative 32B would relocate 31st Street so as to place it next to the SLT, thereby maintaining a single transportation corridor across the property. The government reasonably concluded that this relocation would minimize the impact on the Farm's historic features.

6. Other Environmental and Historical Impacts

The EIS noted that 42A would impact 5.2 acres of riparian woodlands and 18.2 acres of upland woods, while 32B would only impact 1.2 acres of riparian woodlands and 9.6 acres of upland woods. While these impacts may not be extraordinary—and the government does not claim they are—it was reasonable

for the government to take into account the potential impacts on these environmental resources.

The government also noted that 42A would potentially impact two other sites of historic interest: Blanton's Crossing and Meair's Farmstead. Although Blanton's Crossing is not officially listed as a historic site, it was listed in an official Management and Use Plan in 1999 as a "high potential site" for the Oregon and California National Historic Trails. App. at 1337. It was therefore reasonable for the government to take it into account. With regard to Meair's Farmstead, the government noted 42A's potential impact while candidly admitting in the EIS that with mitigation measures the impact would be de minimis. We see no error in the government's approach.

7. 32B's "*Net Benefit*" to Haskell Farm

The EIS claims 32B provides a "net benefit" to the Haskell Farm by creating more wetlands than it destroys, preventing property near the Farm from ever being developed, building educational and recreational facilities in the area, relocating roads, and reducing the level of traffic noise on the Haskell Farm by 2025. Appellants acknowledge that 32B provides some benefits, but claim these benefits are irrelevant to the question whether 42A has unique problems of extraordinary magnitude.

As a general matter, an alternative's prudence is determined by the problems it creates and the extent to which it meets the project's goals—not by

the “benefit” provided by a different alternative. *See* 23 C.F.R. § 774.17. Even so, the relevant regulations do provide for the consideration of beneficial mitigation measures in determining whether an alternative will have a “de minimis impact,” and thus not require consideration of avoidance alternatives. *See* § 774.3(b).

It is less clear whether “net benefits” could be a part of an analysis of “other unique problems or unusual factors.” § 774.17. Appellants do not explain why the government erred in considering the advantages of the selected alternative as a factor relevant to its prudence determination. But even if this factor should not have been considered, the government did not err in its evaluation of the cumulative impacts of alternative 42A.

8. Cumulative Causation of Impacts of Extraordinary Magnitude

In sum, the government determined alternative 42A was imprudent based on “multiple factors . . . that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.” § 774.17. As discussed above, Appellants contested the relevance of only one of the seven factors it considered in reaching that decision—32B’s “net benefit” to the Haskell Farm.

A section 4(f) analysis, like an environmental impact statement, need not be flawless. In *Boomer Lake Park*, for example, we found that FHWA’s failure to consider a certain alternative was a “material fact.” *Boomer Lake Park*, 4 F.3d at 1552. We nonetheless found that “the oversight [was] not sufficient to cause a

reasonable trier of fact to find the Secretary’s decision arbitrary and capricious.”

Id. We found that the legitimate factors considered by FHWA provided sufficient justification to conclude that alternatives to the selected route were imprudent.

Additionally, FHWA considered the benefits of their preferred route as part of their section 4(f) analysis, much as the government did here. Specifically, FHWA found their preferred alternative would improve fishing access, water quality, and bicycle and pedestrian transportation links. *See id.* at 1550.

Although the extent to which FHWA relied on those benefits in its prudence determination is not clear, our affirmance demonstrates at least that the consideration of these side benefits was not fatal, in light of the other factors supporting FHWA’s decision.

Here, it is clear from the record that the government took a “hard look” at several relevant factors—project goals, cost, floodplain impacts, accelerated development, and environmental impacts—and reasonably demonstrated that 42A posed enough problems along these factors to render that alternative imprudent. We have no doubt that had the discussion of 32B’s mitigation measures been deleted entirely from the 4(f) analysis, the government nonetheless would have been justified in rejecting 42A due to its multiple problems. *Cf. id.* at 1553 (“Even without the road-user cost estimate, there is ample evidence to support the Secretary’s decision that the alternatives were imprudent.”).

We thus conclude the government's section 4(f) analysis was sufficient to overcome Appellants' claim it was arbitrary and capricious.

IV. Conclusion

After a close review of the record, we conclude the government's NEPA and section 4(f) analyses were not arbitrary and capricious under the APA. Accordingly, we AFFIRM the judgment of the district court.