

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION

SIERRA CLUB and	§
HOUSTON AUDUBON,	§
	§
Plaintiffs,	§
	§
v.	§
	§
FEDERAL HIGHWAY ADMINISTRATION,	§
DEPARTMENT OF TRANSPORTATION,	§
SECRETARY OF TRANSPORTATION	§
RAYMOND LAHOOD, TEXAS	§
TRANSPORTATION COMMISSION,	§
DEIRDRE DELISI, JANICE BROWN,	§
and JEFFREY F. PANIATI,	§
	§
Defendants.	§

CIVIL ACTION NO. H-09-0692

MEMORANDUM OPINION AND ORDER

Sierra Club and Houston Audubon bring this action against the Federal Highway Administration ("FHWA") and other federal and state defendants seeking an injunction to block construction of a new highway in northwest Houston. At issue is whether the defendants' issuance of an Environmental Impact Statement ("EIS") approving the highway project violated the National Environmental Policy Act ("NEPA") and the Administrative Procedure Act ("APA"). Pending before the court are State Defendants' Motion for Summary Judgment (Docket Entry No. 46), Plaintiffs' Motion for Summary Judgment (Docket Entry No. 47), and Federal Defendants' Motion for Summary Judgment (Docket Entry No. 49). For the reasons explained below,

the court will deny the plaintiffs' motion and will grant the defendants' motions.

I. Background

This action concerns the defendants' approval of construction of "Segment E," an approximately fifteen-mile stretch of new highway in northwest Houston that is projected to be part of a 180-mile loop around Houston known as the "Grand Parkway." Plaintiff Sierra Club is a national nonprofit environmental organization based in San Francisco, California. Houston Audubon is a nonprofit organization that promotes bird conservation in the Houston area. The FHWA is an agency of the United States charged with developing the road transportation systems of the United States. Janice Brown is sued in her official capacity as Division Administrator of the Texas Division of the FHWA. Jeffrey Paniati is sued in his official capacity as Acting Administrator of the FHWA. The FHWA is a part of the United States Department of Transportation, the government department that oversees the national transportation system. Raymond LaHood is sued in his individual capacity as the Secretary of Transportation, the head of the United States Department of Transportation ("USDOT"). The Texas Transportation Commission is a state agency that oversees the Texas Department of Transportation ("TXDOT"). Deirdre Delisi is sued in her official capacity as Chair of the Texas Transportation Commission.

A. The Grand Parkway Segment E

The City of Houston Planning Commission first proposed the Grand Parkway in 1961 as a 170-mile highway loop around the Houston Metropolitan area.¹ Various efforts have been undertaken over the years to initiate construction of the Grand Parkway, although at present most segments of the loop are still in planning stages. Current plans divide the Grand Parkway into eleven lettered segments.² This action concerns only Segment E, an approximately fifteen-mile stretch that is intended to connect Interstate Highway 10 in the Katy area west of Houston to US 290 northwest of Houston.³ Segment E is planned as a four-lane controlled access toll facility.

In August of 1993 TXDOT and FHWA filed a Notice of Intent to prepare an EIS for Segment E.⁴ Public meetings concerning

¹Final Environmental Impact Statement, Grand Parkway State Highway 99 Segment E, November 2007 ("FEIS"), Document 624, Administrative Record 017909. The Administrative Record in this action consists of more than 26,000 pages. Page citations to the Administrative Record will be in the form of "AR {page number}."

²Id. at AR 017911.

³Id. The total length of Segment E is 15.2 miles. However, approximately a mile of the segment on the southern end has already been completed as part of the construction of Segment D, which connects US-59 with Interstate Highway 10 to the southwest of Houston.

⁴Notice of Intent to Prepare an Environmental Impact Statement, Federal Register, Vol. 58, No. 154, p. 43006, August 12, 1993, Document 42, AR 001027.

Segment E were held in September 1993 and February 2000.⁵ Plans for Segment E have been included in several regional transportation planning documents since 1993, including the 1995 National Highway System designation, the Texas Statewide Transportation Improvement Program for 2006 and 2008, the Harris County Major Thoroughfare and Freeway Plan for 2006, the Houston-Galveston Area Council's 2025 Regional Transportation Plan ("RTP"), and the Harris County Transportation Improvement Plan.⁶

FHWA and TXDOT published a Draft Environmental Impact Statement ("DEIS") for Segment E in February of 2003.⁷ A public hearing on the DEIS was held on March 25, 2003.⁸ The records from that hearing show that the Sierra Club expressed concerns that the DEIS provided inadequate discussion of several issues, including cumulative effects, wetlands mitigation measures, and other reasonable alternatives to Segment E.⁹ On April 24, 2003, the Texas Transportation Commission issued Minute Order 109226, which

⁵Re-Evaluation of the Final Environmental Impact Statement for State Highway 99 Grand Parkway Segment E ("Re-Evaluation of FEIS"), June 2009, Document 702, AR 023724.

⁶Id. at AR 018303-4.

⁷Draft Environmental Impact Statement, Grand Parkway State Highway 99 Segment E, February 2003, Document 411, AR 009035-009923.

⁸Re-Evaluation of FEIS, AR 023724.

⁹Public Hearing Documentation Report, March 23, 2003, Document 432, AR 010271-010278, 010281-010315.

states, "The completion of the Grand Parkway is essential and urgent, as construction of the projects would alleviate congestion and improve traffic flow in the Houston metropolitan area and the surrounding region."¹⁰

B. The Final Environmental Impact Statement

FHWA and TXDOT assembled a Study Team of engineers and environmental consultants to perform the analysis necessary to finalize the EIS. Drawing in part on comments received at the public hearing, FHWA and TXDOT selected a Preferred Alternative Alignment for the path of the proposed road.¹¹ FHWA and TXDOT published the Final Environmental Impact Statement ("FEIS") for Segment E on November 19, 2007.¹²

An FEIS must consider alternatives to the proposed government action and must evaluate those alternatives according to the need and purpose for the project. The FEIS summarized the needs for the project as follows:

Transportation improvements are needed in the Segment E study area because there are inefficient connections between suburban communities and major radial highways, the current and future transportation demand exceeds capacity, many roadways in the study area have a high accident rate, and there is an increasing strain on

¹⁰Minute Order 109266, attached to Re-Evaluation of FEIS, AR 023760.

¹¹Re-Evaluation of FEIS, AR 023724.

¹²FEIS, AR 017849-020971.

transportation infrastructure from population and economic growth.¹³

The FEIS summarizes the purposes for Segment E as follows:

The purpose of the proposed transportation improvements in the Segment E study area is to efficiently link the suburban communities and major roadways, enhance mobility and safety, and respond to economic growth. The goal is to improve system linkage, address current and future transportation demand, improve safety, and address population and economic growth.¹⁴

To address these needs and purposes, the Study Team conducted an alternatives analysis comparing a Build alternative with a No-Build alternative and concluded that the Build alternative better meets the needs and purposes for the project.¹⁵ Under the Build alternative, the Study Team considered three different alignments that Segment E could follow and selected a Preferred Alternative Alignment.¹⁶ After publication of the FEIS, notices were placed in local newspapers seeking public comments.¹⁷

The FHWA issued its Record of Decision ("ROD") on June 24, 2008.¹⁸ The ROD concluded that a four-lane controlled access toll

¹³Id. at AR 017858.

¹⁴Id. at AR 017859.

¹⁵Id. at AR 017860-017864.

¹⁶Id. at AR 017864-017866.

¹⁷See Notice of Availability, Houston Chronicle, December 14, 2007, Document 636, AR 021051-021052.

¹⁸Record of Decision, Grand Parkway (State Highway 99) Segment E ("ROD"), Document 668, AR 023192-023258.

road along the Preferred Alignment best meets the needs and purposes of the project.¹⁹

In June of 2009 FHWA and TXDOT issued a Re-Evaluation of the FEIS to consider the implications of a design change at a specific intersection and to follow up on questions left open in the initial FEIS, such as the possible impact of the project on certain endangered species potentially in the construction area.²⁰ The Re-Evaluation concluded that "there have been no significant changes to the assessed areas based upon the proposed design change, updates to regulations or guidance, and progress to commitments and permits."²¹ On June 9, 2009, FHWA issued a Revised Record of Decision incorporating the information in the Re-Evaluation and generally affirming all of the decisions in the initial ROD.²²

C. Procedural History

Sierra Club filed this action on March 9, 2009 (Docket Entry No. 1). On October 15, 2009, Sierra Club moved to add Houston Audubon as a plaintiff and Harris County as a defendant, expand upon two of its original causes of action, and add five new causes of action (Docket Entry No. 29). On November 25, 2009, the court

¹⁹Id. at AR 023194.

²⁰Re-Evaluation of FEIS, AR 023719-023773.

²¹Id. at 023751.

²²Revised Record of Decision, June 9, 2009, Document 706, AR 024855-025009.

granted Sierra Club's motion to add Houston Audubon as a plaintiff but denied Sierra Club's other motions (Docket Entry No. 43). On January 20, 2010, the state defendants filed a motion for summary judgment (Docket Entry No. 46). The plaintiffs filed a motion for summary judgment the same day (Docket Entry No. 47). The federal defendants filed a motion for summary judgment on January 21, 2010 (Docket Entry No. 49). The parties have submitted Responses and Replies (Docket Entry Nos. 56, 57, 60, 61).

D. Sierra Club's Claims

Plaintiffs allege six causes of action against the defendants regarding their issuance of the FEIS and the ROD. Specifically, plaintiffs allege that the defendants violated NEPA, NEPA regulations, and the APA by:

1. Conducting an inadequate and unlawful alternatives analysis;
2. Failing to assess properly the impacts of Segment E on hydrology, drainage, floodways, and floodplains;
3. Failing to disclose significant impacts and indirect effects on wetlands;
4. Failing to disclose significant air impacts and safety risks;
5. Failing to properly disclose noise impacts; and
6. Failing to consider indirect, secondary, and cumulative impacts.²³

²³First Amended Complaint, Docket Entry No. 59, ¶¶ 58-91.

The defendants argue that they are entitled to summary judgment on each of these claims.

II. Applicable Law

A. Standard of Review

In the usual case, summary judgment is proper when the record, viewed in the light most favorable to the non-moving party, establishes that no genuine issue as to any material fact exists, and the moving party is entitled to judgment as a matter of law. See FED. R. CIV. P. 56(c); see Celotex Corp. v. Catrett, 106 S.Ct. 2548, 2553 (1986). A different standard is applied, however, to summary judgment motions addressing agency decisions. "Summary judgment is an appropriate procedure for resolving a challenge to a federal agency's administrative decision when review is based upon the administrative record . . . even though the Court does not employ the standard of review set forth in Rule 56." Tex. Comm. on Natural Res. v. Van Winkle, 197 F. Supp. 2d 586, 595 (N.D. Tex. 2002) (quoting Fund for Animals v. Babbitt, 903 F. Supp. 96, 105 (D.D.C. 1995)). "In reviewing administrative agency decisions, the function of the district court is to determine whether as a matter of law, evidence in the administrative record permitted the agency to make the decision it did." The Sierra Club v. Dombeck, 161 F. Supp. 2d 1052, 1064 (D. Ariz. 2001). "[J]udicial review of agency decisions is not whether there is a genuine issue of material fact but whether the agency action was arbitrary,

capricious, an abuse of discretion, not in accordance with law, or unsupported by substantial evidence on the record taken as a whole." City of Shoreacres v. Waterworth, 332 F. Supp. 2d 992, 1004 (S.D. Tex. 2004) (quoting Welch v. U.S. Air Force, 249 F. Supp. 2d 797, 806 (N.D. Tex. 2003)).

B. Applicable Law - NEPA

The central issue in this action is whether the defendants' actions complied with the requirements of NEPA. "NEPA was intended to reduce or eliminate environmental damage and to promote 'the understanding of the ecological systems and natural resources important to' the United States." Dep't of Transp. v. Public Citizen, 124 S. Ct. 2204, 2209 (2004) (quoting 42 U.S.C. § 4321). NEPA, however, does not accomplish this objective by mandating particular results or prohibiting or controlling certain harmful activities. Id. In fact, "NEPA does not prohibit the undertaking of federal projects patently destructive of the environment." Sabine River Authority v. U.S. Department of Interior, 951 F.2d 669, 676 (5th Cir. 1992). Instead, "NEPA imposes only procedural requirements on federal agencies with a particular focus on requiring agencies to undertake analyses of the environmental impact of their proposals and actions." Public Citizen, 124 S. Ct. at 2209. NEPA requires only that federal agencies be informed of and take a "hard look" at the environmental consequences of their

actions before they proceed, not that they actually make wise environmental decisions. Sabine River Authority, 951 F.2d at 676.

NEPA requires all federal agencies, before engaging in certain activities, to prepare detailed EISs, which describe and analyze the adverse environmental effects of the proposed agency action. See 42 U.S.C. § 4332(2)(C); O'Reilly v. U.S. Army Corps of Engineers, 477 F.3d 225, 228 (5th Cir. 2007). An agency must prepare an EIS for "every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C); see also Norton v. S. Utah Wilderness Alliance, 124 S.Ct. 2373, 2384. Among other things, an EIS must address (1) the environmental impact of the proposed action, (2) any adverse environmental effects that cannot be avoided should the proposal be implemented, and (3) alternatives to the proposed action. See 42 U.S.C. § 4332.

The parties do not dispute that construction of Segment E could significantly affect the environment, or that FHWA was required to prepare an EIS in this instance. What is in dispute is whether the FEIS issued by FHWA and TXDOT complied with the requirements of NEPA. NEPA does not contain its own standards for judicial review; therefore, the FHWA's actions in this case are reviewed under the general provisions of the APA, 5 U.S.C. § 701, et seq. See Marsh v. Oregon Natural Res. Council, 109 S.Ct. 1851, 1860-61 (1989).

C. Arbitrary and Capricious

Under the APA courts must uphold an agency decision unless the decision is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). The Fifth Circuit has stated that "[u]nder this highly deferential standard of review, a reviewing court has the 'least latitude in finding grounds for reversal'" of an agency decision. Sabine River Authority, 951 F.2d at 678. The court may not substitute its own judgment for that of the agency. Id. Because the "analysis of the relevant documents requires a high level of technical expertise, [courts] must defer to the informed discretion of the responsible federal agencies." Marsh, 109 S.Ct. at 1861 (1989) (internal quotation omitted). "[I]f the agency considers the factors and articulates a rational relationship between the facts and the choice made, its decision is not arbitrary and capricious." Delta Foundation, Inc. v. U.S., 303 F.3d 551, 563 (5th Cir. 2002). Nevertheless, the court's review must be "searching and careful," Citizens to Preserve Overton Park, Inc. v. Volpe, 91 S. Ct. 814, 824 (1971).

The Fifth Circuit has set forth three criteria for determining the adequacy of an EIS:

- (1) whether the agency in good faith objectively has taken a hard look at the environmental consequences of a proposed action and alternatives;

(2) whether the EIS provides detail sufficient to allow those who did not participate in its preparation to understand and consider the pertinent environmental influences involved; and

(3) whether the EIS[']s explanation of alternatives is sufficient to permit a reasoned choice among different courses of action. Mississippi River Basin Alliance v. Westphal, 230 F.3d 170, 174 (5th Cir. 2000).

An EIS must provide information to satisfy these criteria. Id. Furthermore, the conclusions upon which an EIS is based must be supported by evidence in the administrative record. Id. at 174-75.

In applying the "arbitrary and capricious" standard, "the focal point for judicial review should be the administrative record already in existence, not some new record made initially in the reviewing court." Camp v. Pitts, 93 S.Ct. 1241, 1244 (1973); see Sierra Club v. United States Fish & Wildlife Serv., 245 F.3d 434, 444 (5th Cir. 2001) ("Review is generally limited to the record in existence at the time the agency made its decision."). In some cases involving NEPA, however, courts will consider evidence outside of the administrative record. The Fifth Circuit has explained that "NEPA imposes a duty on federal agencies to compile a comprehensive analysis of the potential environmental impacts of its proposed action, and review of whether the agency's analysis has satisfied this duty often requires a court to look at evidence outside the administrative record." Sierra Club v. Peterson, 185 F.3d 349, 370 (5th Cir. 1999). "The omission of technical

scientific information is often not obvious from the record itself, and a court may therefore need a plaintiff's aid in calling such omission to its attention." Id.

In this action the court has looked primarily to the administrative record, but has also considered additional evidence presented by the plaintiffs to determine whether there is a clear omission of technical data from the record that would have prevented the defendants from performing the comprehensive analysis required by NEPA.

III. Analysis

Plaintiffs have alleged that the defendants' actions in issuing the FEIS and ROD violated NEPA, NEPA regulations, and the APA in six ways. The parties have filed cross-motions for summary judgment. The central question for each claim is whether the defendants have articulated a rational relationship between the facts and the choice made. See Delta Foundation, 303 F.3d at 563.

A. Claim 1: Inadequate and Unlawful Alternatives Analysis

Plaintiffs' first claim is that the defendants violated NEPA, NEPA regulations, and the APA by conducting an inadequate and unlawful alternatives analysis. Plaintiffs argue that the defendants did not consider all reasonable alternatives because the

"FEIS eliminates viable alternatives, essentially leaving only one alternative, other than a no-build alternative."²⁴

1. Applicable Law

NEPA requires federal agencies proposing actions "significantly affecting the quality of the human environment" to provide a "detailed statement" concerning "alternatives to the proposed action." 42 U.S.C. § 4332(C)(iii). The "alternatives requirement" of NEPA demands that agencies "rigorously explore and objectively evaluate all reasonable alternatives." 40 C.F.R. § 1502.14(a). The EIS must take a hard look at the environmental consequences of the alternatives and must provide an explanation of the alternatives sufficient to permit a reasoned choice among different courses of action. Westphal, 230 F.3d at 174. This analysis requires consideration only of "feasible, non-speculative alternatives." Piedmont Heights Civic Club, Inc. v. Moreland, 637 F.2d 430, 436 (5th Cir. 1981) (citing Vermont Yankee Nuclear Power Corp. v. National Resources Defense Council, 98 S.Ct. 1197, 1215 (1978)). Alternatives are to be evaluated in relation to the objectives of the proposed project, as described in the EIS. See National Wildlife Federation v. F.E.R.C., 912 F.2d 1471, 1484-85 (D.C. Cir. 1990). "An [EIS] may not be held insufficient by a

²⁴First Amended Complaint, Docket Entry No. 1, ¶ 60.

court merely because the agency has failed to discuss in it every conceivable alternative to the proposed project." Ass'n Concerned About Tomorrow, Inc. v. Slater, 40 F. Supp. 2d 823, 832 (N.D. Tex. 1998).

2. The Alternatives Analysis

The FEIS considers two major alternatives, a Build option versus a No-Build option, and then considers several alternative routes within the Build option.²⁵ It evaluates the alternatives according to how well they meet the needs and purposes of the project. Regarding the need for the project, the FEIS states that "there are inefficient connections between suburban communities and major radial highways, the current and future transportation demand exceeds capacity, many roadways in the study area have a high accident rate, and there is an increasing strain on transportation infrastructure from population and economic growth."²⁶ The FEIS states that the goals of the project are "to improve system linkage, address current and future transportation demand, improve safety, and address population and economic growth."²⁷

Prior to comparing the Build and No-Build alternatives, the Study Team conducted a Corridor Study to determine which of three

²⁵FEIS, Volume 2, AR 018325-018358.

²⁶Id. at AR 018312.

²⁷Id. at AR 018314.

alternate corridors would best serve the needs and purposes of the project.²⁸ The study considered issues such as the acreage of wetlands, farmlands, floodplains, and residential property that would be affected by each corridor.²⁹ Considering the results of the study as well as feedback from public meetings, the Study Team chose a corridor that was deemed to best meet the project objectives while reducing potential impact to floodplains, remnant prairie, and residential areas.³⁰

The Build and No-Build options were evaluated in the Transportation Mode Study.³¹ The No-Build option was defined to include all committed improvements found in the Houston-Galveston Area Council's 2025 RTP, including modal transportation improvements such as bus transit, high-occupancy vehicle lanes, rail feasibility, and new planned roadway construction, but not the construction of Segment E or other pending segments of the Grand Parkway.³² The FEIS considers a variety of options under the No-Build alternative and concludes that none of them will meet the needs and purposes of the project. It states that Transportation

²⁸Id. at AR 018326-33.

²⁹Id. at AR 018329.

³⁰Id. at AR 018332.

³¹Id. at AR 018333.

³²Id. at AR 018325.

System Management initiatives, such as park-and-ride lots, ride-sharing, and HOV facilities, "by themselves would not be adequate to handle the rapid growth projected for northwestern Harris County over the next 18 years," in part because the low population density of the area and the lack of a circumferential controlled access highway would limit the effectiveness of such measures.³³ The FEIS concludes that while bus transit in the area could be expanded, additional busing capacity would not in itself "address system linkage, expanded capacity, safety, and economic development."³⁴ The FEIS considers rail transit, but concludes that "[a] rail system offering circumferential travel between radial freeways would not have sufficient ridership to make such a plan financially feasible, and such a facility is not currently planned."³⁵ The FEIS also considers the impact of Smart Streets, a program included in the 2025 RTP that includes measures to improve traffic flow such as synchronization of traffic signals, construction of roundabouts, and partial grade separation of traffic lanes at appropriate intersections.³⁶ The FEIS concludes that Smart Streets will improve mobility and capacity but will not address system linkage or promote economic development.

³³Id. at AR 018334-35.

³⁴Id. at AR 018337.

³⁵Id.

³⁶Id. at AR 018338.

The conclusion of the Transportation Mode Study was that the No-Build alternative fails to satisfy the needs and purposes of the project:

The Segment E area has and will continue to experience growth. The No-Build will result in high traffic volumes being confined to the existing roadway network leading to increased stop-and-go conditions (i.e. increased congestion). The lack of adequate improvements to system linkage and roadway capacity would result in the No-Build Alternative failing to satisfy the need for and purpose of the project.³⁷

The Transportation Mode Study concluded that "[t]he Build Alternative would provide system linkage, expanded capacity to ease circumferential travel around Houston, improved roadway safety, and a relief from barriers to economic development."³⁸

The FEIS also reports the results of a Traffic and Transportation study comparing the predicted results of the Build and No-Build alternatives on traffic issues such as congestion and safety.³⁹ The study suggested that the Build alternative will provide moderate improvements in traffic congestion in 2015 and 2025.⁴⁰ The study also concluded that because "freeways have lower

³⁷Id.

³⁸Id. at AR 018342.

³⁹Id. at AR 018342-49.

⁴⁰Id. at AR 018347, classifying 19% of roads as experiencing serious or severe congestion in 2015 under the Build scenario versus 25% under the No-Build scenario, and 7% of roads as experiencing serious or severe congestion in 2015 under the Build
(continued...)

accident rates per number of vehicles than lower classified roads . . . it can be determined that moving traffic from lower classified facilities, such as collector roadways, to higher classified roadways, such as freeways, . . . would reduce the accident rate in the area."⁴¹ The study estimated that a significant percentage of traffic would move from existing lower classified roadways to the new freeway under the Build scenario, and therefore concluded that "it is likely that the crash rate in the Segment E traffic study area would decrease with the construction of Segment E."⁴² The Traffic and Analysis study concluded that the Build alternative better addressed the project purposes of system linkage, expanded capacity, and safety than did the No-Build alternative.

The FEIS also presents the results of the Alternative Alignment Study, in which the Study Team considered which of three alternative alignments within the preferred corridor would best meet the needs and purposes of the project.⁴³ The study quantified, among other things, the acreage of wetlands, forests, and

⁴⁰(...continued)
scenario versus 9% under the No-Build scenario.

⁴¹Id. at AR 018348.

⁴²Id.

⁴³Id. at AR 018349-58.

floodplains that would be affected by each of the alignments.⁴⁴ After evaluating these factors as well as feedback from public workshops, the Study Team selected a Preferred Alternative Alignment that incorporates a combination of segments from the alternative alignments in a manner intended to minimize impacts to wetlands and floodplains.⁴⁵

3. Analysis

To comply with NEPA's requirements the FEIS must take a hard look at the environmental consequences of the alternatives and must provide an explanation of the alternatives sufficient to permit a reasoned choice among different courses of action. Westphal, 230 F.3d at 174. The court concludes that the FEIS meets these requirements. Plaintiffs have criticized the FEIS for considering only two alternatives, a Build option and a No-Build option, but these options actually encompass several alternatives between them. Within the No-Build option the FEIS considers the impact of different strategies such as transportation system management, bus or rail expansion, and the implementation of the Smart Streets program. Within the Build option the FEIS considers three alternative corridors, and then three alternative alignments within the preferred corridor. Thus, within the Build and No-Build

⁴⁴Id. at AR 018353.

⁴⁵Id. at AR 018357-58.

alternatives the FEIS considers a range of approaches to addressing transportation needs in the region. In any event, "[t]he statutory and regulatory requirements that an agency must consider 'appropriate' and 'reasonable' alternatives do[] not dictate the minimum number of alternatives that an agency must consider." Native Ecosystems Council v. U.S. Forest Service, 428 F.3d 1233, 1246 (9th Cir. 2005). The court concludes that the two alternatives, with multiple approaches considered under each, represent a sufficient range of alternatives to comply with NEPA's requirements.

NEPA requires a hard look at the environmental consequences of the alternatives. As discussed further in the following sections of this opinion, the FEIS provides a great deal of information about the impact of the Build alternative on floodplains, wetlands, air pollution, and noise pollution. Within the Build alternative, the FEIS quantifies the impact that the alternative corridors and alignments would have on wetlands and floodplain areas, and chooses a preferred alignment based on which path is likely to result in the least impact on natural resources. The court is convinced that the FEIS took a "hard look" not only at the environmental consequences of the Build alternative versus the No-Build alternative, but also between the different alternative alignments within the Build alternative. This analysis is sufficient to meet NEPA's requirements.

The analysis also provides a basis for a reasoned choice between alternatives. The FEIS provides data and reasons both to support the Build alternative -- its likely superiority over the No-Build alternative in meeting the goals of system linkage, expanded capacity, improved safety, and accommodation of economic growth -- and to oppose it -- the probable environmental consequences and financial cost of the project. Regarding the alternative alignments, by providing data about the relative impacts of the different alignments on local resources such as wetlands, floodplains, farmlands, and residential areas, as well as providing information about public preferences, the FEIS provides an explanation of the alternatives sufficient to permit a reasoned choice among different courses of action. This analysis meets NEPA's requirements.

The plaintiffs argue that the FEIS states the project's purposes in a way that impermissibly favors the Build alternative. For example, in analyzing alternatives the FEIS states one of the purposes of the project as "expanded capacity." By defining the purpose in this way, instead of, for example, as "addressing increased demand," the plaintiffs argue that the analysis essentially predetermines that the No-Build alternative of increasing bus transit -- which could address increased demand but cannot expand road capacity -- will not meet the project's purposes. Likewise, it would be hard for any initiative other than

a new road to increase system linkage. The plaintiffs thus argue that the purposes of the project are stated in a way that is biased toward the Build alternative. The question is whether this bias, if it exists, violates NEPA requirements.

"[E]vidence that an agency preferred a particular alternative from the outset of the NEPA process does not, by itself, violate NEPA." Conservation Law Foundation v. Federal Highway Admin., 630 F. Supp. 2d 183, 202 (D.N.H. 2007) (citing Environmental Defense Fund, Inc. v. U.S. Army Corps of Eng'rs, 492 F.2d 1123, 1129 (5th Cir. 1974)). In Environmental Defense Fund the Fifth Circuit held that an EIS was sufficient under NEPA, even where the Army Corps of Engineers had shown a clear preference for proceeding with the project prior to creating the EIS, because the Corps conducted the studies for the EIS with "good faith objectivity." 492 F.2d at 1129. In this case the court has seen no evidence that the defendants lacked "good faith objectivity" in researching and cataloguing the many environmental consequences of the Segment E project. Instead, the defendants appear to have diligently followed all federal regulations in compiling the information for the EIS.

Regarding bias in a project's statement of purpose, the Seventh Circuit has held that NEPA does not allow an agency "to contrive a purpose so slender as to define competing 'reasonable alternatives' out of consideration." Simmons v. U.S. Army Corps of

Engineers, 120 F.3d 664, 666 (7th Cir. 1997). In Simmons the court held that an EIS prepared by the Army Corps of Engineers was inadequate because it defined the purpose of the project as to provide water to two water districts from a single source, thus necessitating the creation of a particular dam and lake to provide the water, even though "[a]t no time has the Corps studied whether this single-source idea is the best one -- or even a good one." Id. at 667. Under the facts in Simmons no other reasonable alternative to the proposed action could be considered. That is not the case in the present action. First, the FEIS states four purposes in broad enough terms that a variety of options under the No-Build alternative could be -- and were -- considered. Second, the FEIS provides a rationale for each of the stated purposes. For example, the FEIS explains the need for system linkage by stating that a significant portion of traffic in the study area is engaged in circumferential travel, but that at present the communities and major highways in the area lack a substantial circumferential road to connect them efficiently.⁴⁶ The highly directive purpose discussed in Simmons, by contrast, provided no explanation for why a single water source was necessary to meet the communities' needs. It may be true that only a road can promote the goal of system linkage, but it is also true that existing roads become more useful

⁴⁶FEIS at AR 018312.

when linked efficiently to other roads; system linkage is therefore a rational goal of the project.

Finally, the Segment E FEIS explains why the options under the No-Build alternative do not meet the purposes of the project in such a way that the public could consider the explanations and make a reasoned judgment about them. Although the conclusions in the FEIS about alternatives may be debatable, what matters under NEPA is that the alternatives were considered and the Study Team's reasoning was explained. The court concludes that any bias toward the Build alternative in the statement of purposes is not sufficient to make the FEIS noncompliant with NEPA.

Plaintiffs also argue that the conclusions in the FEIS are not supported by the data it cites. For example, the FEIS supports the Build alternative over the No-Build alternative in part because "current and future demand exceeds capacity."⁴⁷ The data reported in the FEIS, however, shows little improvement in traffic congestion under the Build alternative versus the No-Build alternative. The FEIS reports a study projecting that 19% of roads in the area will experience serious or severe congestion in 2015 under the Build scenario versus 25% under the No-Build scenario, and 7% of roads will experience serious or severe congestion in 2015 under the Build scenario versus 9% under the No-Build

⁴⁷Id.

scenario.⁴⁸ These data suggest only a modest improvement in traffic congestion under the Build scenario. Plaintiffs' complaint is valid in that it calls into question the wisdom of building an expensive and environmentally disruptive road for such modest traffic benefits. It is not the role of this court, however, to question the wisdom of the conclusions expressed in the FEIS. "NEPA merely prohibits uninformed -- rather than unwise -- agency action." Robertson v. Methow Valley Citizens Council, 109 S.Ct. 1835, 1846 (1989). The role of this court is to determine whether the FEIS provides a sufficient explanation of the alternatives to permit a reasoned choice among the different courses of action. In this instance the FEIS provides the relevant data and explains how it reached a conclusion from that data. This is sufficient under NEPA.

While the plaintiffs may present fair criticisms of some of the logic and wisdom displayed in the FEIS, they have not shown that the FEIS fails to take a "hard look" at the alternatives. The discussion of alternatives in the FEIS is substantial, and although it may not be perfect, the FEIS articulates a rational relationship between the facts and the choices made. Therefore, the discussion of alternatives in the FEIS is neither arbitrary nor capricious, and defendants are entitled to summary judgment on this claim.

⁴⁸Id. at AR 018347.

B. Claim 2: Impacts on Hydrology, Drainage, Floodways, and Floodplains

Plaintiffs allege that the defendants violated NEPA, NEPA regulations, and the APA by failing to assess properly the impacts of Segment E on hydrology, drainage, floodways, and floodplains. Plaintiffs' central argument is that the FEIS relies on outdated floodplain maps that underestimate the amount of floodplain that will be affected by the construction of Segment E. Defendants respond that at all times they used the best available floodplain data, and that the most recent floodplain data has been considered in the Re-Evaluation.

1. Discussion of Floodplains in the FEIS

The FEIS discusses impacts of the project on floodplains in several places. The studies to determine a preferred corridor and alignment quantified the acreage of floodplain that would be affected by each corridor and alignment.⁴⁹ A five-page section describes the floodplain environment and provides historical flood data for roads that cross Cypress Creek.⁵⁰ The section states that the floodplain analysis was conducted using the Flood Insurance Rate Maps ("FIRMs") created by the National Flood Insurance Program ("NFIP"), a federal program administered by the Federal Emergency

⁴⁹Id. at AR 018329, 018353.

⁵⁰Id. at AR 018404-08.

Management Program ("FEMA").⁵¹ The FIRMs for Harris County incorporated data from the Tropical Storm Allison Recovery Project and were finalized in December of 2006 and became effective as of June 18, 2007.⁵²

A twelve-page section of the FEIS describes the likely environmental consequences of the project on local floodplains.⁵³ The section identifies the federal floodplain regulations it must follow and states that "Floodplain regulations also require the utilization of NFIP maps to identify the limits of the base (100-year) floodplain."⁵⁴ The floodplain analysis was conducted using the NFIP maps that were effective as of June 18, 2007.⁵⁵ Those maps indicated that Segment E under the preferred alignment would encroach on 56.85 acres of floodway and 128.25 acres of the 100-year floodplain, which was estimated to be 5.55 percent of the 100-year floodplain in the project area.⁵⁶ The FEIS states:

The alternative alignments were designed to avoid impacts to floodplains to the maximum extent feasible and practicable. In Reach 1, Alternative Alignment B . . . was shifted to the east near South Mayde and Bear Creek to avoid not only the floodplains, but also

⁵¹Id. at AR 018405.

⁵²Id.

⁵³Id. at AR 018513-24.

⁵⁴Id. at AR 018516.

⁵⁵Id.

⁵⁶Id. at AR 018519.

wetlands. . . . The Preferred Alternative Alignment would bridge all of the regulatory floodways it crosses, and final design will include further consideration of bridging 100-year floodplains.⁵⁷

The FEIS also discusses options to mitigate impacts on floodplains, and states that the final design will be made in conjunction with Harris County authorities.⁵⁸

2. Revised Floodplain Data

Shortly after the ROD was issued the Harris County Flood Control District performed a study on the Upper Cypress Creek watershed that resulted in a proposed Physical Map Revision ("PMR").⁵⁹ The PMR data suggested that the 100-year floodplain was more extensive than had been represented on the previous FIRMs, which the FEIS had relied on in calculating floodplain impacts. The PMR is under review by FEMA, and once approved will require the revision of existing FIRMs.⁶⁰ Harris County Commissioner's Court adopted the PMR data as the best available floodplain data on August 19, 2008.⁶¹

The FEIS Re-Evaluation analyzed the impact of Segment E on floodplains under the latest PMR data, and concluded that under the

⁵⁷Id. at AR 018521.

⁵⁸Id. at AR 018566-67.

⁵⁹Re-Evaluation of FEIS, AR 023736.

⁶⁰Id.

⁶¹Id.

preferred alternative alignment the project will encroach on 57.2 acres of floodway and 136.1 acres of 100-year floodplain.⁶² This represents an increase of 0.4 acres of encroached floodway and 7.8 acres of encroached floodplain from the results reported in the FEIS. Concerning this increase, the Re-Evaluation states:

The 100-yr floodplain acreage was not the primary reason for the selection of a preferred corridor within Reach 2, and the increase in the amounts of 100-yr floodplain acreage due to the Cypress Creek PMR would not change the reasons for the selection of a preferred corridor within Reach 2.⁶³

The Re-Evaluation also states:

Because the floodplain boundaries of the watercourses in the study area traverse the entire study area, and because the Selected Alternative minimizes the floodplain encroachment for the alternatives within the preferred corridor, the Selected Alternative is the only practicable alternative for limiting floodplain encroachment. With regard to the affected environment for waterbody modifications and floodplains, the ROD analysis remains valid.⁶⁴

3. Analysis

The court concludes that the defendants have taken the requisite "hard look" at the environmental consequences to wetlands of the proposed action. See Westphal, 230 F.3d at 174. The FEIS describes the extent of floodplains in the area, describes the likely effects of the project on area floodplains, and explains the

⁶²Id. at AR 023738.

⁶³Id. at AR 023736-37.

⁶⁴Id. at AR 023739.

process by which the Study Team sought to minimize impacts to floodplains through route selection and roadway design. While the data relied on in the FEIS was subsequently revised, it was reasonable for the defendants to rely on the same floodplain maps relied on by the NFIP and FEMA. Although there may have been reason to believe that the maps were not 100 percent accurate, they provided the best available official data at the time, and it cannot be said that defendants acted arbitrarily or capriciously in relying on them. Furthermore, once the more accurate PMR data became available the defendants incorporated the new data into the Re-Evaluation. The Re-Evaluation shows that the additional floodplain acreage encroached on by the project is not a substantial increase from what was reported in the FEIS. The Re-Evaluation also explains why the new data does not indicate that the choice of preferred alignment should be altered. The court concludes that the FEIS and Re-Evaluation allow those who did not participate in their preparation to understand and consider the pertinent environmental influences involved. See Westphal, 230 F.3d at 174. This discussion is sufficient under NEPA, and therefore defendants are entitled to summary judgment on this claim.

C. Claim 3: Significant Impacts and Indirect Effects on Wetlands

Plaintiffs allege that the defendants violated NEPA, NEPA regulations, and the APA by failing to disclose significant impacts and indirect effects on wetlands. Plaintiffs argue that the FEIS

is inadequate because it underestimates Segment E's impact on wetlands, it fails to discuss alternatives that would minimize impact to wetlands, and it fails to include a mitigation plan or an adequate discussion of mitigation measures.⁶⁵

1. Applicable Law

NEPA requires a hard look at the environmental consequences of Segment E, which includes any impact on wetlands. See Westphal, 230 F.3d at 174. NEPA also requires a discussion of avoiding and mitigating harm. "Implicit in NEPA's demand that an agency prepare a detailed statement on 'any adverse environmental effects which cannot be avoided should the proposal be implemented,' 42 U.S.C. § 4332(C)(ii), is an understanding that the EIS will discuss the extent to which adverse effects can be avoided." Robertson, 109 S.Ct. at 1846-47. "[O]mission of a reasonably complete discussion of possible mitigation measures would undermine the 'action-forcing' function of NEPA." Id. at 1847. Thus, an EIS must both discuss adverse environmental effects and provide a reasonably complete discussion of ways to mitigate them. "There is a fundamental distinction, however, between a requirement that mitigation be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated, on the one

⁶⁵Plaintiffs' Motion for Summary Judgment, Docket Entry No. 47, pp. 26-29.

hand, and a substantive requirement that a complete mitigation plan be actually formulated and adopted, on the other." Id. "It would be inconsistent with NEPA's reliance on procedural mechanisms -- as opposed to substantive, result-based standards -- to demand the presence of a fully developed plan that will mitigate environmental harm before an agency can act." Id.

2. Discussion of Wetlands in the Record

The discussion of wetlands in the record is extensive. Defendants have identified more than twenty documents in the record prior to the FEIS that discuss wetland issues, including a 1993 Environmental Overview of the Grand Parkway Project by TXDOT,⁶⁶ an estimate by the U.S. Army Corps of Engineers ("USACE") in 1997 that 15.13 acres of wetlands would be included in the project right-of-way,⁶⁷ a 2001 discussion of alternative alignments that considers the wetland impacts of the different alignments,⁶⁸ a 2006 letter from the USACE stating that the project area contains waters of the United States such that it is subject to USACE jurisdiction under

⁶⁶Environmental Overview - Grand Parkway, Document 38, AR 000848-0001015 (wetlands discussed AR 000873-000874).

⁶⁷Letter from Casey Cutler to Roy Knowles, January 8, 1997, Document 75, AR 002109.

⁶⁸Corridor and Alignment Study, April 10, 2001, Document 291, AR 007802-007819.

Section 404 of the Clean Water Act,⁶⁹ and a 2006 white paper supporting the cumulative effects analysis on wetlands for Segment E.⁷⁰

The FEIS discusses wetlands in several places. The FEIS describes the types of wetlands found in the project area,⁷¹ as well as the likely direct and indirect impacts of construction of Segment E on local wetlands.⁷² The FEIS considers the likely impact of alternative alignments on wetlands, and concludes that the preferred alignment will impact 40.83 acres of non-forested wetlands and 2.03 acres of forested wetlands.⁷³ The FEIS discusses mitigation options, including planning of highway alignment, roadway design elements such as bridge crossings and retention basins, on-site restoration of degraded habitats, and off-site creation of wetlands.⁷⁴ While the FEIS does not present a comprehensive mitigation plan with specific requirements, it discusses a coordinated effort with the Texas Parks and Wildlife

⁶⁹Letter from John Davidson to David Gornet, January 5, 2006, Document 542, AR 014561-014563.

⁷⁰Defining Resource Study Areas for Wetlands, March 2006, Document 554, AR 015029-015940.

⁷¹FEIS, Volume 2, AR 018390-018395, 018397-018398.

⁷²Id. at AR 018491-018504.

⁷³Id. at AR 018503.

⁷⁴Id. at AR 018561-018565.

Department, the U.S. Fisheries and Wildlife Service, and USACE to develop a mitigation plan that will offset wetlands impacts, particularly through off-site measures.⁷⁵ The Record of Decision states:

Off-site mitigation projects for wetlands must be designed to reestablish, to the extent reasonable, similar wetland functions, values, and type as the pre-existing site. Potential off-site areas considered for enhancement, restoration, and or preservation include tracts of land within and adjacent to the Spring Creek floodplain that may be placed under conservation easement or purchased and placed under perpetual deed restriction. Other options may include use of the Katy-Cypress Mitigation Bank, wetland creation on property currently owned by Harris County Precinct 3, and wetland creation at the Westside Airport site. Mitigation alternatives associated with on-site mitigation and off-site mitigation will continue to be investigated and evaluated by the Grand Parkway Association (GPA), Texas Parks and Wildlife Department (TPWD), U.S. Fish and Wildlife Service (USFWS), U.S. Environmental Protection Agency (EPA), and U.S. Army Corps of Engineers (USACE). A compensatory mitigation plan will be submitted to the USACE as part of the Section 404 permit review process.⁷⁶

The Section 404 permit application and mitigation plan was submitted to the USACE on March 24, 2009.⁷⁷ The 2009 Re-Evaluation states, "With regard to the affected environment for wetland impacts, the ROD analysis remains valid."⁷⁸

⁷⁵Id. at AR 018562-018563.

⁷⁶ROD, AR 023207.

⁷⁷Re-Evaluation of FEIS, AR 023735.

⁷⁸Id. at AR 023736.

3. Analysis

The court concludes that the defendants have taken a hard look at the adverse environmental impacts Segment E is likely to have on wetlands, and that they have provided a reasonably complete discussion of possible mitigation measures. The record shows that the defendants have made a sustained effort since the early 1990's to document the types of wetland habitats in the affected region and to quantify the impact that the construction project will have on those habitats. The FEIS discusses mitigation efforts that can reduce those impacts or compensate for them through off-site projects. Defendants have followed the procedures that NEPA requires.

Plaintiffs argue that the defendants improperly evaluated the extent of wetlands affected by Segment E because the estimates in the FEIS were based on the old floodplain maps that underestimated the extent of the floodplain. Plaintiffs' argument is unpersuasive for two reasons. First, the FEIS states that the evaluation of the extent of wetlands affected was based on field investigations and aerial photo interpretation; the FEIS does not claim to have based the wetlands evaluations on the floodplain maps.⁷⁹ Second, the 2009 Re-Evaluation, which considered the effects of the revised floodplain maps, states, "With regard to the affected environment

⁷⁹FEIS, Volume 2, AR 018390.

for wetland impacts, the ROD analysis remains valid.”⁸⁰ The court concludes that the changes in the floodplain maps do not make the wetlands analysis in the FEIS inadequate.

Plaintiffs also argue that the FEIS fails to consider the indirect impact on wetlands resulting from the increased development spurred by the construction of Segment E. Plaintiffs are incorrect. The FEIS states, “Construction of the new location roadway would likely facilitate new development in proximity to proposed access points resulting in a gradual decrease of remnant emergent wetlands (prairie potholes) and human-induced wetlands (rice fields) on the prairie; therefore, leading to the removal or fragmentation of wildlife habitat.”⁸¹ The FEIS notes however that development in the affected wetlands would require coordination with the USACE and other permitting agencies.⁸² Although the discussion is brief, the FEIS clearly considers the indirect impacts of induced growth.

Plaintiffs argue that the FEIS’s discussion of wetlands is inadequate because it fails to consider the option of spanning the wetlands with bridges. Plaintiffs’ assertion is not accurate. The FEIS states, “Preliminary design of the Preferred Alternative

⁸⁰Id. at AR 023736.

⁸¹Id. at AR 018504.

⁸²Id.

Alignment includes bridging stream crossings with portions of the wetlands and riparian forest adjacent to South Mayde Creek and Cypress Creek. Further minimization of impact through bridging would be considered during final design."⁸³ To the extent that plaintiffs' argument is that this discussion is inadequate, the court notes that, as discussed above concerning the FEIS's consideration of alternatives, NEPA does not require that the defendants consider every possible alternative. Since the FEIS is concerned primarily with whether and where to build Segment E, and leaves most design considerations for later approval in conjunction with other agencies, the court concludes that the discussion of this design alternative meets NEPA's requirements.

Finally, plaintiffs argue that the discussion of mitigation in the FEIS is inadequate because it "is so broad and general as to amount to no mitigation plan at all."⁸⁴ The court disagrees. The FEIS discusses mitigation options such as roadway design elements on-site restoration of degraded habitats, and off-site creation of wetlands.⁸⁵ The FEIS discusses a coordinated effort with TPWD, USFWS, and USACE to develop a mitigation plan that will offset

⁸³Id. at AR 018562.

⁸⁴Plaintiffs' Motion for Summary Judgment, Docket Entry No. 47, p. 28.

⁸⁵Id. at AR 018561-018565.

wetlands impacts, particularly through off-site measures.⁸⁶ Although defendants have not formulated and adopted a complete mitigation plan, they are not required to. See Robertson, 109 S.Ct. at 1847. As in Robertson, the defendants' ability to commit to mitigation efforts is circumscribed by the need to work with other state and federal agencies in enacting a complete mitigation plan. See id. ("[I]t would be incongruous to conclude that the Forest Service has no power to act until the local agencies have reached a final conclusion on what mitigating measures they consider necessary."). Defendants have moved mitigation efforts forward by submitting a Section 404 permit application and mitigation plan to the USACE, the agency that will have the final say on whether construction impacting wetlands can proceed. The discussion of mitigation measures is adequate under NEPA.

For the reasons described above, the court concludes that the plaintiffs have failed to establish that the discussion of wetlands impacts in the FEIS is inadequate under NEPA, or that the defendants' decisions based on that discussion were arbitrary or capricious. Defendants are entitled to summary judgment on this claim.

⁸⁶Id. at AR 018562-018563.

D. Claim 4: Significant Air Impacts

Plaintiffs allege that the defendants violated NEPA, NEPA regulations, and the APA by failing to disclose significant air impacts and safety risks. Specifically, plaintiffs allege that the FEIS is inadequate because of its failure to assess and consider the effects of the highway on local levels of particulate matter, its failure to consider the effects of air pollution on human health, and its failure to consider greenhouse gas emissions.⁸⁷

Defendants respond that "there is no law, statute, regulation or programmatic guidance which requires discussion of any of the alleged negative health effects of the specific air issues."⁸⁸ Defendants further argue that the administrative record shows that FHWA and TXDOT gave air quality issues the "hard look" required by NEPA.⁸⁹

1. Consideration of Air Quality in the Record

The FEIS addresses the topic of air quality in a number of places. Under the heading "Air Quality Impacts," the FEIS notes that the Houston area is in attainment for all Clean Air Act

⁸⁷Plaintiffs' Motion for Summary Judgment, Docket Entry No. 47, pp. 30-31.

⁸⁸Federal Defendants' Motion for Summary Judgment, Docket Entry No. 49, pp. 24-25.

⁸⁹Id.

criteria air pollutants except for ozone (O3), but states, "Segment E will not contribute to additional violations nor prolong attaining the National Ambient Air Quality Standards (NAAQS) for O3."⁹⁰ The FEIS states, "The Houston area is not designated non-attainment for particulate matter (PM)," but acknowledges that "fugitive dust may be generated during project construction."⁹¹

In a nine-page section addressing "Air Quality," the FEIS describes how the EPA protects the public health from air pollution by setting air quality standards for six criteria pollutants (including particulate matter), and notes that the only criteria pollutant for which the Houston area is out of attainment is ozone.⁹² The FEIS states: "Under the regulations, added capacity projects, such as the Grand Parkway, may advance to construction only if they are part of the RTP and TIP [Transportation Improvement Plan] that have been determined to conform to the SIP [State Implementation Plan] by the MPO [Metropolitan Planning Organization] and USDOT."⁹³ The FEIS then notes that the project has been included in the relevant state planning documents in the past, but that because dates in the past documents have become

⁹⁰FEIS, Volume 1, AR 017870.

⁹¹Id.

⁹²Id. at AR 017982-017990. The same information is provided in Volume 2, AR 018375-018382.

⁹³Id. at AR 017984.

obsolete, "FHWA will not take final action on this environmental document until the proposed project is consistent with a currently conforming transportation plan." The FEIS also discusses mobile source air toxics ("MSATs"), and notes that the only areas of Houston found to have elevated levels of priority MSATs are around the Houston Ship Channel, more than twenty-five miles away from Segment E.⁹⁴ The FEIS models future MSAT contributions from the Grand Parkway segments and concludes that "MSAT will continue to improve over time due to dramatic improvements in vehicle technology and fuels and traffic flow improvements realized over time."⁹⁵

The Record of Decision concludes that Segment E will not contribute to a violation of NAAQS for either ozone or carbon monoxide.⁹⁶ The ROD states that some MSATs are projected to be slightly higher under a Build scenario rather than under a No-Build scenario, but that by 2025 air levels of MSATs will be substantially lower than current levels under either scenario.⁹⁷ The ROD also states that there will be some temporary air quality

⁹⁴Id. at AR 017984-017990.

⁹⁵Id. at AR 017990.

⁹⁶ROD, AR 023202.

⁹⁷Id. at AR 023203-023204.

effects resulting from the use of construction equipment while the road is being built.⁹⁸

2. Analysis

The court concludes that the administrative record shows that the defendants gave a hard look at air quality issues in the FEIS and ROD. The defendants considered air quality through the framework used by the EPA and the Clean Air Act to analyze air quality issues -- the NAAQS for criteria pollutants -- and concluded that construction of Segment E would not lead the Houston area to violate the NAAQS for any criteria pollutant. The defendants' decision to consider air pollution issues through the same framework used by the EPA to enforce the Clean Air Act cannot be considered arbitrary or capricious. Also, since the FEIS specifically addresses the issue of particulate matter under the NAAQS framework, the court concludes that the defendants have not failed to consider the highway's effects on local levels of particulate matter.

The court has not found any evidence that the defendants considered the impact of Segment E on greenhouse gas emissions. The plaintiffs have not, however, pointed to any law or regulation showing that defendants' failure to consider greenhouse gas

⁹⁸Id.

emissions makes the FEIS inadequate, or makes the decision of the FHWA arbitrary or capricious. Because the defendants considered the issues of particulate matter and the effects of air pollution on human health, and because the defendants were not required to consider the effects of Segment E on greenhouse gas emissions, the court concludes that the defendants are entitled to summary judgment as to the plaintiffs' claims regarding consideration of air pollution.

E. Claim 5: Noise Impacts

Plaintiffs allege that the FEIS underestimates the potential noise impacts of Segment E, and that the defendants have failed to consider fully all reasonable noise abatement measures, including noise absorbing pavement and vegetation barriers. Defendants argue that noise abatement measures have been adequately considered. Plaintiffs indicated in their Response on February 17, 2010, that they do not intend to pursue their claims regarding noise impacts.⁹⁹ The claims, however, are still asserted in the plaintiffs' First Amended Complaint, which was filed on March 1, 2010.¹⁰⁰ The court will therefore consider these claims.

⁹⁹Plaintiffs' Combined Response to Defendants' Motions for Summary Judgment, Docket Entry No. 57, p. 5.

¹⁰⁰First Amended Complaint, Docket Entry No. 59, ¶¶ 87-89.

1. Applicable Law

FHWA's regulations concerning noise abatement are found at 23 C.F.R. § 772. Plaintiffs allege that defendants have violated 3 C.F.R. § 772.11(c), which states, "If a noise impact is identified, the abatement measures listed in § 772.13(c) of this chapter must be considered." The regulations define "traffic noise impact" as "Impacts which occur when the predicted traffic noise levels approach or exceed the noise abatement criteria . . . or when the predicted traffic noise levels substantially exceed the existing noise levels." 23 C.F.R. § 772.5(g). "Abatement will usually be necessary only where frequent human use occurs and a lowered noise level would be of benefit." 23 C.F.R. § 772.11(a).

2. The Record

The FEIS discusses traffic noise in a number of places, most extensively in a nine-page analysis specific to Segment E.¹⁰¹ The FEIS describes how noise measurements were taken at several locations along the proposed path of the highway in 2002 and 2006 according to TXDOT guidelines. It states that traffic is expected to create a noise impact at nine of the locations in which measurements were made, and estimates the decibel-level increase in

¹⁰¹FEIS, Volume 2, AR 018475-018483.

traffic noise at each spot if Segment E is built.¹⁰² The FEIS discusses possible noise abatement strategies, including traffic management, noise barriers, alteration of the horizontal or vertical highway alignment, and noise buffer zones.¹⁰³ It concludes that noise barriers would not be cost-effective for any of the receiver locations experiencing a noise impact, and ultimately that “[n]o noise abatement measures would be feasible or reasonable.”¹⁰⁴

3. Analysis

The court concludes that the FEIS provides the necessary “hard look” at the issue of traffic noise. It follows agency guidelines in taking noise measurements at relevant locations and then forecasting what the noise impact will be at those locations if the project is completed. The FEIS considers noise abatement measures, but concludes that none are cost-effective. The defendants have met their obligations under 23 C.F.R. § 772.

Plaintiffs allege that the FEIS underestimates the potential noise impacts of Segment E, but they provide no evidence that this is the case. Such conclusory allegations do not provide grounds for relief. Plaintiffs also allege that defendants have failed to

¹⁰²Id. at AR 018478.

¹⁰³Id. at AR 018480-018481.

¹⁰⁴Id. at AR 018481, 018483.

consider fully all reasonable noise abatement measures, including noise absorbing pavement and vegetation barriers. Plaintiffs do not provide any legal basis for concluding that defendants are obligated to consider these specific measures, which are not listed among the recommended noise abatement measures in 23 C.F.R. § 772.13(c). The court concludes that the plaintiffs have failed to establish that the defendants' actions were arbitrary or capricious regarding traffic noise abatement. Defendants are therefore entitled to summary judgment on this issue.

F. Claim 6: Indirect, Secondary, and Cumulative Impacts

Plaintiffs argue that the defendants have violated NEPA, NEPA regulations, and the APA by failing to consider indirect, secondary, and cumulative impacts.¹⁰⁵ Plaintiffs do not specify in either their Complaint or their Motion for Summary Judgment what indirect, secondary, or cumulative effects the defendants failed to consider.

Plaintiffs' conclusory allegations fail because the FEIS provides an extensive discussion of indirect and cumulative effects in a seventy-page section titled "Indirect and Cumulative Effects."¹⁰⁶ This section considers the probable consequences of

¹⁰⁵First Amended Complaint, Docket Entry No. 59, ¶¶ 90-91.

¹⁰⁶FEIS, Volume 2, AR 018570-018639.

the construction of Segment E on an Area of Influence encompassing approximately 945 square miles in the northwest Houston metropolitan area. The section considers issues such as land use forecasting,¹⁰⁷ indirect effects on natural and cultural resources,¹⁰⁸ cumulative effects on the Katy Prairie,¹⁰⁹ and the projected compound annual growth rate of households in the Area of Influence under the Build and No-Build scenarios.¹¹⁰ While the section does not identify every possible indirect effect of building Segment E, it does consider a wide variety of possible consequences.

Plaintiffs allege that this consideration is inadequate, but do not point to any particular topic that is addressed inadequately. In the absence of any such specific allegations, the court concludes that the defendants have taken a hard look at the possible indirect and cumulative effects of the construction project. Defendants are entitled to summary judgment on this claim.

¹⁰⁷Id. at AR 018573-018576.

¹⁰⁸Id. at AR 018581.

¹⁰⁹Id. at AR 018591-018592.

¹¹⁰Id. at AR 018622.

IV. Conclusion and Order

For the reasons explained above, the court concludes that the administrative record shows that the defendants did not act arbitrarily or capriciously in issuing the FEIS and ROD recommending construction of Segment E of the Grand Parkway. Defendants are entitled to summary judgment on all claims. Accordingly, State Defendants' Motion for Summary Judgment (Docket Entry No. 46) and Federal Defendants' Motion for Summary Judgment (Docket Entry No. 49) are **GRANTED**, and Plaintiffs' Motion for Summary Judgment (Docket Entry No. 47) is **DENIED**.

SIGNED at Houston, Texas, on this the 19th day of May, 2010.



SIM LAKE
UNITED STATES DISTRICT JUDGE