UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

NORTH TEXAS CONSERVATION ASSOCIATION, *Petitioner*, vs. TEXAS DEPARTMENT OF TRANSPORTATION, and DAN HARMON, in his capacity as Director of the Texas Department of Transportation Aviation Division, CITY OF MCKINNEY, TEXAS, GEORGE FULLER, in his capacity as Mayor of the City of McKinney, Texas, FEDERAL AVIATION ADMINISTRATION, and CHRIS ROCHELEAU, in his capacity as Administrator of the Federal Aviation Administration, *Respondents*.	§	**NO.** 25-1135

PETITION FOR REVIEW

Pursuant to 49 U.S.C. § 46110(a), North Texas Conservation Association ("Association"), by and through undersigned counsel, hereby petition this Court for review of the Finding of No Significant Impact ("FONSI") and Record of Decision ("ROD") issued the by Texas Department of Transportation ("TxDOT") for the proposed Eastside Development at McKinney National Airport ("Project"), issued on April 21, 2025, and attached hereto.

TxDOT issued these findings pursuant to the authority delegated under the State Block Grant Program by the Federal Aviation Administration ("FAA"). However, the Environmental Assessment ("EA") detailing these findings fails to comply with the National Environmental Policy Act ("NEPA"). Therefore, the FONSI and ROD are arbitrary, capricious, and unlawful.

The Association and its members have been or will be harmed by the deficient EA and the resulting unlawful FONSI and ROD. Pursuant to 49 U.S.C. § 46110(a), this petition is timely filed within sixty (60) days of the issuance of the final agency action.

BACKGROUND

The McKinney National Airport ("TKI" or "Airport") is located about 30 miles north of downtown Dallas. The Project proposes a significant expansion of the Airport. Specifically, the Project includes the construction of a four-gate terminal, parking for travelers, rental car services and employees, ground transportation services, fuel farm, service road rehabilitation, taxiway connections and apron, and two remain overnight areas.

The North Texas Conservation Association, and its members are adversely affected by the approval of the Project and will be adversely affected by the Project itself. The Association is dedicated to protecting the environment, wildlife, and rural

character of McKinney, Texas and the surrounding areas. Thus, the Association and its members have a substantial interest in this Project.

GROUNDS FOR REVIEW

An Environmental Assessment must comply with the substantive and procedural requirements of the National Environmental Policy Act ("NEPA") and judicial precedent. The EA prepared for the McKinney National Airport fails to comply with NEPA and relevant case law. Detailed below is a non-exhaustive list of key deficiencies in the EA.

1. Inadequate Alternative Analysis

NEPA requires federal agencies, like TxDOT, to study, develop, and describe technically and economically feasible alternatives. This includes the duty to consider a reasonable range of technically and economically feasible alternatives that could reduce environmental impacts and also meet the project's purpose and need.

The EA fails to evaluate a reasonable range of alternatives. The Proposed Action and the No Action Alternative were the only alternatives assessed. This approach is far from sufficient to satisfy the requirement to consider a reasonable range of alternatives. Merely comparing the Project to doing nothing is not reasonable and fails to comply with NEPA.

TxDOT asserts that all other potential alternatives were dismissed to reduce costs, avoid additional land acquisition, and reduce environmental impacts. This

rationale is not enough to reject other alternatives. The EA states that TxDOT considered other terminal locations with up to 20 gates and several facility options. The rejection of these alternatives was only based on data based on growth projections and demand models. However, other feasible alternatives should have been considered. For example, a smaller footprint, alternative configurations, or a different location or airport were completely dismissed as possible alternatives without appropriate consideration. No feasible alternatives were ever considered or analyzed. TxDOT's failure to adequately assess a reasonable range of alternatives violates NEPA.

2. Failure to Consider Effects of Induced Growth

Under NEPA, TxDOT must evaluate the reasonably foreseeable environmental effects of the proposed action. The EA fails to analyze the reasonably foreseeable effects of induced growth, including the impacts on traffic, housing development, and land use changes. The EA incorrectly assumes that growth will occur regardless of the project, but this assumption fails to acknowledge how expanding the airport will induce the growth in the area.

3. Failure to Take a "Hard Look" at Environmental Impacts

The EA fails to take a "hard look" at several environmental consequences of the Project. After an agency identifies a relevant environmental concern, then the agency must take a "hard look" at the problem in preparing the EA. If a FONSI is

made, the agency must be able to make a convincing case for its finding. For instance, TxDOT failed to take a "hard look "at impacts on air quality, wildlife, wetlands, and noise, just to name a few. TxDOT fails to provide data, modeling, or mitigation commitments for these impacts.

Air Quality

Under NEPA, TxDOT has a duty to disclose and evaluate the impact of the airport expansion on ambient air quality. The EA fails to disclose or analyze the increased air pollution stemming from the construction and expansion of this Project. The Association has a direct interest in maintaining air quality. The construction of the airport, increased aircraft activity, and increased vehicle traffic will result in increased pollution. The diminished air quality will negatively impact people and contribute to climate change. It will also negatively impact the wildlife near and around the vicinity of the Airport. Wildlife, like birds and amphibians, could suffer negative impacts from the increased pollution. The EA lacks adequate modeling or data addressing these impacts. Thus, TxDOT failed to take the requisite "hard look" at how the Project will affect ambient air quality.

Wildlife and Vegetation

The expansion of the Airport will result in about 240 acres of land clearing. The clearing of this land will result in disruption of habitats, loss of habitats, tree loss, and other negative impacts to wildlife.

As mentioned above, the Airport's impacts on air quality will also negatively impact the surrounding wildlife. For example, the Heard Natural Science Museum & Wildlife Sanctuary ("Heard Museum") opened in 1967, long before construction began on the McKinney airport. The Heard Museum is a 289-acre wildlife sanctuary that is a haven for more than 240 species of birds, mammals, reptiles and amphibians. The Heard Museum is also home to nearly 150 species of wildflowers and many other growing plants. A large part of the museum's wildlife sanctuary is within less than one mile from the airport's boundary. TxDOT alleges that site design would minimize the removal of vegetations; however, this assertion is inconsistent with the Project's planned clearing of about 240 acres of land. The EA fails to take a "hard look" at how habitat loss, increased noise, light pollution, and other environmental impacts will affect these species and ecosystems.

Additionally, the EA fails to assess impacts on migratory birds and protected species. McKinney, Texas is located within the Central Flyway, a primary migration route for a multitude of migratory birds, including whooping cranes. Whooping cranes are an endangered species and protected by the Endangered Species Act. In addition, bald eagles are often sighted on the grounds of the Heard Museum's wildlife sanctuary. Although the EA determines in a conclusory manner that there would not be any substantial safety concerns for wildlife and for aviation safety, it fails to assess the effects of increased aircraft activity on protected birds, migratory

birds, or potential disruptions to birds during stopovers. TxDOT proposes a Wildlife Hazard Management Plan that would be developed to minimize potential avian bird strikes and other wildlife effect. This plan is vague, unexplained, and lacks concrete mitigation. Furthermore, the EA only states that no suitable habitats are present within the study area but fails to address the impacts to nearby habitats, such as the Heard Museum, and fails to address impacts to the migrations of migratory birds such as the whooping crane. The Project will only avoid removal and destruction of active bird nests on the airport property, which fails to address broader effects on migratory routes and possible indirect impacts to the bald eagles and whooping cranes. Clearly, TxDOT failed to take a "hard look" at significant impacts to wildlife and vegetation.

Wetlands

The EA states that no wetlands are present within the study area, which, according to TxDOT, means that no further analysis is needed. However, wetlands exist within the vicinity of the Project. The Heard Museum maintains about 50-acres of sensitive wetland area within the floodplain of Wilson Creek. These wetlands were originally established at the Heard Museum with the assistance of a grant from the U.S. Environmental Protection Agency. The EA fails to analyze any impacts on these wetlands, nor does it propose any mitigation. TxDOT failed to acknowledge or take a "hard look" at impacts on nearby wetlands.

Noise

The EA fails to properly analyze the negative impacts of noise pollution. While the EA admits residential land uses to the south of the airport will be exposed to a reportable noise impact due to the project, it makes no effort to analyze these impacts or require any mitigation.

Heritage Ranch Golf & Country Club ("Heritage Ranch") is located in Fairview, Texas, directly south of the McKinney airport. Heritage Ranch was established around the year 2000, before the City of McKinney expressed any desire for the McKinney airport to offer commercial airline service. Heritage Ranch is home to a heavily used golf course, over 1,100 residences, and about 2,000 people. The northern boundary of Heritage Ranch is located only about 1.2 miles from the southern boundary of the airport.

Aircraft departing the McKinney airport to the south will fly at low altitudes directly over the heart of Heritage Ranch, its residential neighborhoods, and its golf course. This increased noise will necessarily have a negative impact on property values throughout Heritage Ranch. The EA, however, neglected to analyze the impact of the increased noise pollution on the residents of Heritage Ranch. It also neglected to require any noise mitigation measures.

Similarly, the Heard Museum will be subjected to increased noise levels from the project. Although it is located to the southwest of the airport, it is close enough

for aircraft noise to disturb visitors to the museum. It is also located close enough for aircraft noise to disturb birds and other wildlife at or in the vicinity of the museum. The EA contain no analysis of how the increased noise will affect migration patterns of migratory birds, how it will impact the number of birds at the Heard Museum, or how it will impact the number of people who visit the museum.

4. Inadequate Public Engagement

Public comment was solicitated on the EA. However, the EA does not substantively or adequately address or respond to the concerns raised during the public comment period. The administrative record demonstrates the public's opposition and concern. The public has expressed concerns regarding noise, adverse impacts to the Heard Museum, increased traffic, air quality impacts, wildlife impacts and other environmental impacts.

NEPA requires agencies to engage in transparent, responsive decision-making, not merely a procedural formality. Public participation is the cornerstone of NEPA, and TxDOT must meaningfully consider and respond to public comments during the environmental review process. Here, the EA is inadequate as TxDOT failed to take a "hard look" at public impact.

CONCLUSION

Petitioner reserves the right to supplement this filing upon release of the administrative record. Petitioner anticipates addressing additional factual or legal issues and asserting any other claims that may arise once the administrative record is available.

RELIEF REQUESTED

Petitioner respectfully requests that this Court:

1. Vacate the FONSI and ROD issued by TxDOT;
2. Remand back to TxDOT for full and complete compliance with NEPA; and
3. Grant any other relief as may be necessary and appropriate or as the Court deems just and proper.

Dated: May 26, 2025

Respectfully submitted,

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RULE 26.1 CORPORATE DISCLOSURE STATEMENT

North Texas Conservation Association is a nonprofit 501(c)(3) membership corporation that advocates for the protection of the Heard Foundation and the surrounding area. North Texas Conservation Association does not have any parent corporation and does not issue stock.

Dated: May 26, 2025

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, Charles Irvine, hereby certify under penalty of perjury that on May 26, 2025, I served a copy of the foregoing Petition for Review by electronic filing using the CM/ECF System on the following parties pursuant to F.R.A.P. 15(c) and Circuit Rule 15(a):

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Dated: May 26, 2025

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Attachment

Final Environmental Assessment (EA)

McKinney National Airport
Eastside Development Project

City of McKinney
McKinney, Texas

April 2025

FAA has assigned NEPA responsibility for this project to TxDOT Aviation through the State Block Grant Program. This Environmental Assessment becomes an approved document when evaluated, signed and dated by the Responsible TxDOT Aviation Official.

Doug Booher
Responsible TxDOT Aviation Official

21 April 2025
Date

Responsible City of McKinney Official

4/17/25
Date

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1.0 Introduction and Background

The McKinney National Airport (TKI or Airport) is a general aviation airport that is owned and operated by the City of McKinney (City) and serves business and personal aviation in the North Texas region. The airport acts as a reliever airport for Dallas Love Field and Dallas/Fort Worth International Airport. The Airport is located approximately 30 miles north of downtown Dallas and is situated adjacent to the intersection of Airport Drive and Industrial Boulevard, just south of United States Highway (US) 380. A general location map of the Airport is shown in **Appendix A: Project Location Map**.

The City of McKinney has owned the airport since it opened in 1979. Construction of the Airport initiated in 1977 when a Federal Aviation Administration (FAA) grant allowed for the acquisition of the property necessary to develop TKI, construct a runway, taxiways, and general aviation apron area. The construction of these facilities led to the opening of the Airport in 1979, when the runway was only 4,000 feet long and 75 feet wide. Over the last thirty years, continued additions and other improvements have been made to increase capacity and provide facilities to meet aviation demand.

The City of McKinney first opened the Airport as McKinney Municipal Airport but renamed it Collin County Regional Airport in 2003. Ten years later, the name changed again to McKinney National Airport to reflect its updated designation as a national facility in the General Aviation Airports: A National Asset (2012) study done by the FAA. The City purchased the Fixed Base Operations (FBO) and its facilities – McKinney Air Center – in November 2013 from a private owner/developer. The City owns 745 acres of dedicated Airport land and receives revenue primarily from land leases, hangar rental, and fuel flowage fees, in addition to generating ad velorem taxes.

The FBO, called McKinney Air Center, which offers fueling, aircraft housing (temporary or permanent), and any other special requests that may be needed, is owned and operated by the City. The airport, in concert with the city-owned FBO, manages approximately 400,000 square feet of hangar space and associated office space. Hangar types and uses include T-hangars, box hangars, SASO hangars, corporate hangars and executive hangars.

The FAA 2023-2027 National Plan of Integrated Airport Systems (Sept 2022) included information on current activities for all airports including TKI. The number of revenue passengers that boarded aircraft at the Airport in 2021 was 258 for TKI. It was also reported that there are 226 registered aircraft hangered or based at the airport. Included in this count are single engine, multiengine, jets and helicopters as reported by the Airport and verified through the N number registry. Not included in these totals are military aircraft, ultra-lights, gliders, and balloons.

The current Airport Layout Plan (ALP) was approved in 2019 and is currently being updated to reflect recent infrastructure improvements. The ALP depicts commercial service facilities located in the proposed area covered in this Environmental Assessment (EA).

The following objectives were identified during the project development for the TKI design improvements:

- Differentiate itself from its competitors to become the airport of choice in the metroplex.

- Be a lifestyle airport with an inviting and premium passenger experience.
- Optimize operational efficiency to elevate the passenger experience and minimize life cycle costs.
- Fully leverage the latest technology to focus on the needs of passengers.
- Be a catalyst of an integrated mixed use airport district.
- Accommodate growth and change in a way that minimizes future disruption.

TKI developed a master plan for addressing necessary airport improvements. The 2019 Airport Master Plan (Plan) was developed to cover a 20-year planning period that serves as a "timely reassessment of the development direction of TKI to meet the needs of the local economy and ever-changing air transportation industry." The plan thoroughly documented growth patterns regarding increased enplanements and regional population growth. Data and information in the Plan is considered recent; therefore, many resource evaluations such as demographics, broad scale socioeconomic discussions, and enplanement forecasts are still considered applicable to this EA. As a result, that document will serve as a resource and is referenced in this EA.

As a result of the Plan and studies to explore viability and potential for commercial services, TKI proposes to expand its facilities to support the documented and projected increases in regional growth and demand of passenger travel. The proposed project would be funded by TKI and the City of McKinney through a combination of local, state and federal grant sources. As TKI is part of the state grant program, the lead agency for the proposed project is Texas Department of Transportation (TxDOT) Aviation in coordination with the FAA.

This document was developed pursuant to the National Environmental Policy Act of 1969 (NEPA), Public Law 91-190 as amended (42 U.S.C. § 4321- 4370) and NEPA implementing regulations issued by the Council on Environmental Quality (40 Code of Federal Regulations (CFR) § 1500-1508)) and FAA Orders 5050.4B and 1050.1F, and the FAA Environmental Desk Reference for Airport Actions. A list of EA preparers is provided in **Section 11**.

2.0 Purpose and Need

2.1 Need

The proposed project is needed because future population and economic growth in the region would result in an increased demand for future commercial and passenger services in the area.

2.2 Supporting Data

2.2.1 Regional Population Growth

According to the 2020 Census population data, Collin County is the 3rd largest county in the Dallas-Fort Worth Combined Statistical Area (CSA). It is expected to have the largest population growth in the Dallas-Fort Worth CSA through 2040 adding 620,000 people or growing an average of 2.3 percent each year. This growth from 2020 to 2040 would bring the Collin County population from 13 percent to 16 percent of the Dallas-Fort Worth CSA population.

With this increased population growth, there are anticipated to be more travelers in the area for commercial service. In the 2022 Market Analysis prepared for the City of McKinney, an area of

potential demand for commercial service was studied through delineating zip codes in close proximity to TKI compared to the other airports in the area, (Dallas-Fort Worth International Airport [DFW] and Love Field [DAL]). The area called the primary catchment area, shown in the market analysis report included in **Appendix B**, consists of an area in close driving distance to TKI compared to DFW and DAL where travelers are more likely to choose to use TKI based solely on driving distance benefit. As described in the study, there was a potential of approximately 845,000 enplanements in 2021 within the primary catchment area. Based on these 2021 numbers, a projection of 1.9 million enplanements is projected in 2040. The 2022 Market Analysis is included in **Appendix B**.

2.2.2 Regional Economic Growth

The market analysis, as previously mentioned, was conducted for the City of McKinney to assist in determining the future needs of the region and potential growth of commercial services. It also provided data on future population and economic growth projections. Forty-two percent of the existing population in Collin County has an average household income of greater than or equal to $100,000 annually. This is considerably higher than the 26 percent of households for the whole of the Dallas-Fort Worth CSA and 22 percent of households at the national level.

The overall economy in Collin County grew by an average with a compound growth rate (CAGR) of 6.2 percent annually from 2000 to 2020 with jobs growing 4.9 percent annually in that same time period. Both CAGR percentages far exceeded levels seen in the region and in the nation as shown in **Table 1**.

Table 1: Economic Trends

Area	Gross Regional Product (in Billions of 2012 Dollars)					Total Employment (in thousands of jobs)				
				CAGR%					CAGR %	
	2000	2020	2040	2000-2020	2020-2040	2000	2020	2040	2000-2020	2020-2040
Collin County	19	62	145	6.2	4.3	246	645	1,407	4.9	4
Dallas-Fort Worth CSA	297	480	888	2.4	3.1	3,608	5,286	8,211	1.9	2.2
United States	13,020	18,729	29,097	1.8	2.2	165,371	191,619	260,220	0.7	1.5

CSA= Combined Statistical Area.
Source: Woods and Poole Economics, Inc. Regional Projections, 2021; CMP, McKinney National Airport Market Analysis, 2022.

2.2.3 Increased Commercial Service Demand

Forecasts included in the market analysis show viability of airlines and carriers to launch service at TKI. The Airport can provide shorter travel distances to meet the population demand and support the additional airport passenger services from future growth in Collin County. The

market forecast analysis was conducted to determine potential enplanements and travel demands for the TKI service area. The analysis included five projected scenarios with varying levels of annual enplanements. As shown in **Tables 2** and **3**, the estimated number of gates needed are listed with the associated daily departures and enplanements projected in 2026 and 2040.

Table 2: 2026 Demand Forecast

Baseline Demand Forecast	Very Low	Low	Medium	High	Very High
TKI Primary Catchment Capture %	10%	20%	30%	40%	50%
TKI Secondary Catchment Capture %	5%	10%	15%	20%	25%
Local Domestic Enplanements	178K	355K	533K	710K	888K
Seats per Departure	150	150	150	150	150
Load Factor	80%	80%	80%	80%	80%
Average Daily Departures	4	8	12	16	20
Departures per Gate	6	6	6	6	6
Gates Needed	1	2	3	3	4

Source: CMT Market Analysis, 2022.

Table 3: 2040 Demand Forecast

Baseline Demand Forecast	Very Low	Low	Medium	High	Very High
TKI Primary Catchment Capture %	10%	20%	30%	40%	50%
TKI Secondary Catchment Capture %	5%	10%	15%	20%	25%
Local Domestic Enplanements	273K	547K	820K	1.1M	1.4M
Seats per Departure	150	150	150	150	150
Load Factor	80%	80%	80%	80%	80%
Average Daily Departures	6	13	19	25	31
Departures per Gate	6	6	6	6	6
Gates Needed	2	3	4	5	6

Source: CMT Market Analysis, 2022.

The need for the proposed project is to accommodate projected enplanements and aircraft operations as a result of regional population and economic growth in the greater DFW area. The previous airport master plan forecast data was determined to have underestimated growth trends in the area and this was realized when the Master Plan Update (MPU) was produced in 2018. The 2019 Airport Master Plan provides detailed documentation of the significant growth trends of the McKinney and North Texas region. Historical data of actual enplanements recorded between 2013 and 2016 (FAA, 2019) indicated an approximate 1.2 million enplanements increase over the four-year period. Based on the 2022 Market Analysis, the analysis projected a possible 178,000 to 888,000 annual enplanements in 2026. By 2040, the analysis shows an increase in enplanements to range from 273,000 to 1.4 million annually for

TKI. These are considering both primary and secondary catchment areas that TKI has the potential to attract passengers for commercial services.

2.3 Purpose

The purpose of the project is to meet the demand for commercial and passenger service resulting from projected future population and economic growth in the region. All design and development associated with the Proposed Action would meet current FAA Airport Design Standards per Advisory Circular (AC) 150/5300-13A, 14 Code of Federal Regulations (CFR) Part 77 airspace regulations and other appropriate FAA ACs.

3.0 Alternatives

NEPA and its implementing regulations require that impacts to the natural and human environment resulting from a Proposed Action and any reasonable alternatives are fully considered. Only alternatives that would meet the defined need for the Proposed Action and be operationally feasible require detailed analysis in this EA.

A no action alternative and several action alternatives were initially evaluated to address the need for the Proposed Action. All but one action alternative was dismissed and not carried forward for further review in this document as discussed in Section 3.3. The no action alternative was also dismissed, however was carried forward for further review to satisfy NEPA requirements.

The action alternative carried forward is the Proposed Action described in Section 3.2. TKI proposes to expand its facilities to support the documented and projected increases in regional growth and demand of passenger travel by constructing a 4-gate terminal facility and related improvements as part of the Proposed Action.

3.1 No Action

The No Action Alternative would not include any improvements to the Airport and no changes would occur within the eastern portion of the Airport property. No improvements would be constructed, and no impacts would result. This alternative would not meet the purpose and need of the project to accommodate for future population and economic growth in the area; however, this alternative is carried through the analysis for comparison purposes to the Action Alternative(s).

3.2 Proposed Action

The Proposed Action Alternative would consist of several improvements to the Airport and include several facilities within the eastern portion of the Airport property. Improvements would include the following features and shown in **Appendix A: Proposed Action Layout**.

- Terminal with four proposed gates
- Ground parking for travelers, rental car services and employees
- Ground transportation services
- Fuel Farm
- Service road rehabilitation
- Taxiway connections

- Apron and 2 remain overnight (RON) areas

The proposed improvements would be completed through phased construction to accommodate airlines as intent and operations increase over time. The interim improvements, or Phase I, are shown in the Phase I Layout included in **Appendix A**. Phase I includes areas for an interim apron, hangar/terminal, service roads, and parking areas to support operations for one airline. These improvements would not preclude the construction of the ultimate proposed action as additional airlines and funding are secured. The Proposed Action, considered as the ultimate configuration and construction of the listed improvements above, is studied and evaluated for the purposes of this EA. The Proposed Action Alternative was chosen as the most feasible and prudent alternative to address the purpose and need of the project. The Proposed Action would provide the needed facilities to address future demand resulting from the projected future population and economic growth in the area.

The Proposed Action would be designed with a terminal facility and apron to be compatible with the existing runway, which includes two RON airside parking areas and a second taxiway for the safe and efficient maneuvering of aircraft. An intersection evaluation for FM 546 and airport access to the new proposed facilities was conducted and included in **Appendix J**. Proposed terminal and airport improvements would address capacity and configuration needs to provide an enhanced customer experience and safe and efficient passenger movement on airport property. As shown in **Table 2** of **Section 2.2.3**, the 2026 demand forecast included a “very high” level projection of 20 daily departures which is used for the basis of the proposed four-gate terminal. For the purposes of this EA, this level projection is used as the most conservative estimate for the environmental analyses for the ultimate proposed action.

3.3 Preliminary Alternatives Considered but Eliminated from Further Consideration

Other terminal locations with proposed gates of up to 20 gates were proposed and several facility options were also discussed and eliminated from further consideration. Data based on growth projections and service demand models determined that extensive improvements beyond the Proposed Action were not warranted. Other alternatives also required additional land acquisition; therefore, these alternatives were eliminated from further consideration to reduce cost and avoid additional land and environmental impacts.

4.0 Affected Environment, Environmental Consequences, and Mitigation

Resources were identified and impacts evaluated according to FAA Orders 1050.1F, 1050.1F Desk Reference, and 5050.4B. As described in Section 3.1, the No Action Alternative is retained to satisfy the requirements of NEPA and provide an environmental baseline for the Proposed Action. Agencies consulted during preparation of the EA also contributed to the evaluation of the potential effects on specific resources.

The direct study area associated with the Proposed Action is shown in **Appendix A: Study Area Map**. The study area, also referred to as the area of potential effects (APE), is approximately 245 acres and includes the area east of the existing runway, where the proposed terminal building and associated construction would occur. Direct impacts are not anticipated to extend beyond this study area.

Some resource categories have been eliminated from further evaluation in this EA due to either the absence of the resource within the study area or because activities proposed would not impact baseline conditions of the resource category. Resources not present or affected by implementation of any of the alternatives are Section 6(f), coastal, marine and navigable water resources.

Resources potentially impacted by the Proposed Action and the No Action Alternative are evaluated in the following sections in accordance with FAA Order 1050.1F. These sections identify direct, indirect and reasonably foreseeable effects of the No Action and Proposed Action alternatives.

4.1 Air Quality

Under the National Environmental Policy Act (NEPA), federal agencies must consider the impact their actions will have on the environment compared to a no action alternative. According to FAA NEPA implementing guidance (FAA Order 1050.1F and Desk Reference, and FAA Order 5050.4B), impacts to air quality must be considered as part of the environmental analysis under NEPA. Potential effects of the Proposed Action are evaluated against the National Ambient Air Quality Standards (NAAQS), as promulgated by the United States (US) Environmental Protection Agency (EPA) under the Federal Clean Air Act (CAA).

National Ambient Air Quality Standards
The EPA established National Ambient Air Quality Standards (NAAQS) under the Clean Air Act (CAA) for six main pollutants: ozone, nitrogen dioxide, sulfur dioxide, carbon monoxide, lead, and particulate matter (PM10 and PM2.5). Under the CAA, each state is required to implement a State Implementation Plan (SIP). Stationary Source Rules in the Texas Administrative Code are part of the SIP strategy to meet the NAAQS by limiting emissions from stationary sources. Conformity to the SIP is required for the Proposed Action.

The NAAQS apply to the concentration of a pollutant in outdoor ambient air. If the air quality in a geographic area is equal to or better than the national standard, the US EPA will typically designate the region as an “attainment area.” An area where air quality does not meet the national standard is typically designated by the US EPA as a “non-attainment area.” Once the air quality in a non-attainment area improves to the point where it meets the standards and the additional requirements outlined in the CAA, the US EPA can re-designate the area to attainment upon approval of a Maintenance Plan, and these areas are then referred to as “maintenance areas.” Each state is required to prepare a State Implementation Plan (SIP) that outlines measures that regions within the state will implement to attain the applicable air quality standard in non-attainment areas for applicable criteria air pollutant, and to maintain compliance with the applicable air quality standard in maintenance areas. The status and severity of pollutant concentrations in a particular area will impact the types of measures a state must take to reach attainment with the NAAQS. The US EPA must review and approve each state’s SIP to ensure the proposed measures are sufficient to either attain or maintain compliance with the NAAQS within a set period of time.

In accordance with FAA 1050.1F Desk Reference, air quality impacts were evaluated for the Proposed Action. Under the General Conformity Rule and NEPA, a project’s impact on air quality is assessed by evaluating whether it would cause a new violation of a NAAQS or

contribute to a new violation in a manner that would increase the frequency or severity of a new violation.[1] For this analysis, the air emissions from the Proposed Action construction emissions and the net change in additional aircraft operations and associated trip traffic (general access vehicles) were compared to the applicable US EPA de minimis levels for determining significant impacts. Documentation of detailed analysis and findings are included in **Appendix C**.

General Conformity Rule

The General Conformity Rule defines a federal action as any activity engaged in by a department, agency, or instrumentality of the federal government, or any activity that a department, agency, or instrumentality of the federal government supports in any way, provides financial assistance for, licenses, permits, or approves. General Conformity is defined as demonstrating that a project or action conforms to the State Implementation Plan's (SIP's) purpose of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of such standards. Federally funded and approved actions at airports are subject to the US EPA's General Conformity regulations. The General Conformity Rule[2] applies to all federal actions except for certain highway and transit programs which must instead comply with the Transportation Conformity Plans.[3] The Proposed Action does not include highway federal funding or transit component; therefore, transportation conformity does not apply to the Proposed Action.

The General Conformity Rule includes annual emissions thresholds for nonattainment and maintenance areas that trigger the need for a General Conformity determination and defines projects that are typically excluded from General Conformity requirements. Since the General Conformity Rule applies to federally funded projects in US EPA-designated non-attainment and maintenance areas, the General Conformity requirements apply to this Proposed Action at TKI.[4] Under the General Conformity Rule and NEPA, a project's impact on air quality is assessed by evaluating whether it would cause a new violation of a NAAQS or contribute to a new violation in a manner that would increase the frequency or severity of a new violation.[5]

Mobile sources of air emissions include motor vehicles and other engines and equipment that can be moved from one location to another. These are typically classified as "onroad sources" and "nonroad sources". Road sources include automobiles, light-duty, and heavy-duty trucks.

4.1.1 Affected Environment

Air quality in the Dallas-Fort Worth area (including Collin County) is currently designated by the US Environmental Protection Agency (EPA) Greenbook as being in attainment for all criteria pollutants except for the 2008 and 2015 8-hour ozone standard which is designated by US EPA as non-attainment.[6] The US EPA recently reclassified the Dallas-Fort Worth area, including Collin County for the 2008 ozone standard from serious to severe and the 2015 ozone standard from marginal to moderate. This redesignation will determine the de minimis thresholds used for General Conformity Applicability. Because the Dallas-Fort Worth area is designated as non-

[1] https://www.faa.gov/sites/faa.gov/files/about/office_org/headquarters_offices/apl/1-air-quality.pdf
[2] Revisions to the General Conformity Rule are codified under 40 CFR Parts 51 and 93, Subpart W, Revisions to the General Conformity Regulations, Final Rule (April 2010).
[3] 40 CFR Part 93, Subpart A.
[4] TKI is located in an US EPA-designated non-attainment area for ozone.
[5] https://www.faa.gov/sites/faa.gov/files/about/office_org/headquarters_offices/apl/1-air-quality.pdf
[6] https://www3.epa.gov/airquality/greenbook/anayo_tx.html

attainment for some pollutants, the General Conformity Rule applies to this Proposed Action. Emissions are required to be within the state allotted emissions budgets for compliance.

The Proposed Action would induce changes in aircraft operations and additional vehicle trips compared to the No Action alternative during or after construction. Therefore, air emissions associated with aircraft and general access vehicles were inventoried and evaluated. A quantitative analysis of direct and indirect air emissions from the Proposed Action construction/demolition activities, along with the net change in additional aircraft operations, and associated trip traffic (general access vehicles) was performed and compared to the applicable US EPA de minimis levels for determining General Conformity applicability and significant impacts under NEPA. Documentation of detailed analysis and findings are included in **Appendix C**.

The aircraft fleet, engine type, and number of operations for the Existing Condition was based on 2021 data from the FAA's NOP. For forecast years, the airframe types were modified slightly to account for aircraft that are assumed to be decommissioned by 2026 and/or 2031, and the increased use of newly certified aircraft.

4.1.2 Environmental Consequences and Mitigation

No Action Alternative
Construction and demolition emissions were not estimated for the No Action alternative, because no demolition or construction activity would be associated with the No Action alternative. The No Action alternative assumes that the Proposed Action is not implemented, and air quality would remain unchanged for 2026 and 2031. Therefore, no additional air quality impacts would occur as a result of choosing the No Action alternative.

Proposed Action
Estimates of construction and demolition-related emissions were developed for the Proposed Action using standard industry methodologies and techniques including the FAA Aviation Emissions and Air Quality Handbook and associated US EPA guidance, MOVES3 (version 3.0.4) for both onroad and nonroad source emission factors. Construction activities associated with the Proposed Action were estimated for 2024 through 2026.

For aircraft operations emissions, the latest version of the Aviation Environmental Design Tool (AEDT) as approved by FAA was used. The aircraft fleet, engine type, and number of operations for the Existing Condition was based on 2021 data from the FAA's National Offload Program (NOP). For forecast years, the airframe types were modified slightly to account for aircraft that are assumed to be decommissioned by 2026 and/or 2031, and the increased use of newly certified aircraft. Additional mobile source vehicle trips associated with the new aircraft operations were also estimated using US EPA MOVES emission factors.

Significant Thresholds
Estimates of construction and demolition-related emissions were developed for the Proposed Action using standard industry methodologies and techniques including the FAA Aviation Emissions and Air Quality Handbook and associated US EPA guidance, MOVES3 (version 3.0.4) for both onroad and nonroad source emission factors. Construction activities associated with the Proposed Action were estimated for 2024 through 2026.

Summary of Emissions

Based on the analysis, the total construction emissions for both on-road and non-road sources for the 2024 and 2025 construction years would be below established *de minimis* thresholds for all pollutants. Therefore, a General Conformity determination is not required for the construction and demolition activities in 2024 and 2025 for the Proposed Action. Additionally, in accordance with the FAA 1050.1 Desk Reference,[7] the Proposed Action can be determined to "not cause a significant air quality impact, since it is unlikely the pollutant concentration analyzed would exceed a NAAQS." No significant adverse air quality impacts would be expected to result from construction alone of the Proposed Action.

However, the net operational emissions change from the Proposed Action compared to the No Action for the 2026 and 2036 years would be above the US EPA established *de minimis* thresholds. Therefore, a General Conformity determination was required and conducted for the Proposed Action to mitigate required emissions and demonstrate emissions would not exceed the NAAQS.

Mitigation and BMPs

As indicated in **Section 4.1.2**, the net change in emissions for the Proposed Action for 2026 and 2036 would exceed the US EPA *de minimis* thresholds and mitigation measures are evaluated in the General Conformity Determination to address conformity with the TCEQ SIP and NAAQS. Accordingly, coordination with TCEQ was required and conducted for the proposed project. Documentation and determinations by the TCEQ are included in **Appendix D** along with the air related reports and documentation included in **Appendix C**. In summary, the general conformity determination demonstrated and detailed that excess emissions reductions exist within the applicable Texas SIP that could be used to account for ozone precursor emissions generated by the Proposed Action. In other words, the Proposed Action meets the General Conformity Determination requirements.

4.2 Biological Resources

Under sections 7(a)(1) and 7(a)(2) of the Endangered Species Act and its implementing regulations (50 CFR 402 et seq.), federal agencies are required to utilize their authorities to carry out programs for the conservation of federally listed threatened or endangered species and to determine whether projects may affect these species and/or their designated critical habitat.

4.2.1 Affected Environment

The study area for Biological Resources is considered the direct study area as shown in **Appendix A: Study Area Map,** as well as areas generally adjacent to the direct study area and tributaries downstream of the direct study area to account for indirect effects. The U.S. Fish and Wildlife Service (USFWS) was consulted early during the development of this EA to comply with Section 7 of the Endangered Species Act for potential impacts to federally listed species. The Texas Parks and Wildlife Department (TPWD) was also contacted to assess potential impacts to state listed rare, threatened, and endangered species in the study area. Agency responses are included in **Appendix D**.

[7] https://www.faa.gov/about/office_org/headquarters_offices/apl/environ_policy_guidance/policy/faa_nepa_order/desk_ref

Existing conditions on and surrounding the airport are consistent with a rapidly growing metropolitan area. The airport is surrounded primarily by open land, much of which is used for agricultural purposes. Industrial and single- and multi-family residential developments can be found adjacent to the airport, with concentrations of development to the west and northwest. A visual inspection of habitat in the study area was conducted on April 14th, 2022, by the project team. No state- or federally threatened or endangered plant or animal species were identified during the site visit. No sensitive biotic communities were identified during the site visit.

Plants

The majority of the study area is comprised of herbaceous vegetation on lots that, according to historical aerial imagery, have been previously cleared. Dominant plant species include johnsongrass (*Sorghum halepense*), ragweed (*Ambrosia sp.*), Bermuda grass (*Cynodon dactylon*), and bahiagrass (*Paspalum notatum*). Forested areas are also present and are primarily confined to streams and drainages. The dominant vegetation found in forested/riparian areas includes hackberry (*Celtis occidentalis*), elms (*Ulmus spp.*), oaks (*Quercus spp.*), greenbrier (*Smilax sp.*), and poison ivy (*Toxicodendron radicans*). Eastern redbud (*Cercis canadensis*) and eastern redcedar (*Juniperus virginiana*) are common on forest fringes.

Wildlife

The presence of wildlife is likely highest in forested, riparian areas in the study area where there is more protection and separation from human development. The study area has the potential to support small mammals, reptiles, insects, birds, macroinvertebrates, and small fish species. Ungulate remains were observed during the site visit, suggesting that forested areas may support deer as well. Herbaceous areas are relatively dense and may provide adequate cover for birds and small mammals. Though these fields have been cleared in the past, they are not regularly mowed and maintained and support dense, weedy vegetation. Habitat suitability for rare, threatened, and endangered species is discussed later in this section.

Birds

The proposed project will comply with applicable provisions of the Migratory Bird Treaty Act (MBTA) and Texas Parks and Wildlife Code Title 5, Subtitle B, Chapter 64, Birds. The USFWS identified seven migratory bird species of particular concern with the potential to occur in Collin County, including the bald eagle (*Haliaeetus leucocephalus*), chimney swift (*Chaetura pelagica*), Henslow's sparrow (*Centronyx henslowii*), lesser yellowlegs (*Tringa flavipes*), little blue heron (*Egretta caerulea*), prothonotary warbler (*Protonotaria citrea*), and red-headed woodpecker (*Melanerpes erythrocephalus*). Suitable habitat for the listed migratory birds is only present for Henslow's sparrow, which could be found in the open, herbaceous habitat of the study area. The transient nature of migrating individuals and the capability of flight would allow these species to avoid active construction and operations.

The Bald and Golden Eagle Protection Act provides for the protection of the Bald Eagle and the Golden Eagle by prohibiting, except under certain specified conditions, the taking, possession, and sale of such birds. There is no suitable eagle nesting or roosting habitat within the proposed project area. The project is also not within 660 feet of a known active or inactive Bald or Golden Eagle nest.

Aquatic Fauna
One shallow, intermittent stream (Stream 1) and five associated ephemeral streams (Stream 2-6) were identified during the site visit. Stream 1 has connections to the East Fork of the Trinity River and has an approximate ordinary high watermark (OHWM) of four feet wide by five inches deep. The substrate of this stream is clay. Water was observed in the intermittent stream and portions of the ephemeral streams during the site visit. Because the stream is relatively shallow, the species that are likely to occur in the study area would be limited to small freshwater fish, such as minnows (*Cyrinus carpio*, *Cyprinella lutrensis*, *Pimephales promelas*), or aquatic macroinvertebrates. The presence of fish would increase closer to the East Fork of the Trinity River, located approximately one mile downstream of the study area. Information regarding water features in the study area is detailed in **Section 4.12**.

There are no USFWS-identified stream groupings for federally- and state-listed mussel species within or directly downstream of the study area. There are no National Oceanic and Atmospheric Administration essential fish habitats located along streams within the study area.

Rare, Threatened and Endangered Species
The Information, Planning, and Consultation System (IPaC) is a project tool used by the USFWS to provide agency coordination and determine if critical habitat is located within a project area. The IPaC was officially requested on August 12, 2024, and the official species list letter is included in **Appendix E**. The USFWS listed seven threatened, endangered, proposed threatened, proposed endangered, or candidate species, identified as potentially occurring within Collin County. There is no designated critical habitat located within the project area for any of the listed species.

Table 4. USFWS Federally Listed Species Within the Ground Disturbance Study Area

Species	Federal Status	Habitat Requirements	Habitat Present within Ground Disturbance Study Area
Birds			
Piping Plover (*Charadrius melodus*)	Threatened	Breeding birds use shorelines around small alkaline lakes, large reservoir beaches, river islands and adjacent sand pits, beaches on large lakes, and industrial pond shorelines. Outside of breeding habitat, this species is typically on ocean beaches or on sand or algal flats in protected bays. Most abundant on expansive sandflats, sandy mudflats, and sandy beaches in close proximity. Primary threats are destruction and degradation of summer and winter habitat, shoreline erosion, human disturbance of nesting and foraging birds, and predation.	Suitable habitat is not present within the study area.
Red Knot (*Calidris canutus rufa*)	Threatened	Breeding habitats are elevated and sparsely vegetated ridges or slopes. They are often adjacent to wetlands and lake edges for feeding. Wintering and migration habitats are often muddy or sandy coastal areas, such as the mouths of bays and estuaries, and tidal flats. Increased commercial harvest of horseshoe crabs has greatly reduced red knot food resources (horseshoe crab eggs), body condition during spring migration, and annual survival for population that migrate along the U.S. Atlantic coast.	Suitable habitat is not present within the study area.
Whooping Crane (*Grus americana*)	Endangered	Nesting occurs in dense emergent vegetation in shallow (often slightly alkaline) ponds, freshwater marshes, wet prairies, or along lake margins. Habitat during migration and winter includes marshes, shallow lakes, lagoons, salt flats, grain and stubble fields, and barrier islands. Historically, population declines were caused by shooting and destruction of nesting habitat in the prairies from agricultural development.	Suitable habitat is not present within the study area.
Reptiles			
Alligator Snapping Turtle (*Macrochelys temminckii*)	Proposed Threatened	Habitat consists of slow-moving, deep water of rivers, sloughs, oxbows, and canals or lakes associated with rivers (e.g., large impoundments including reservoirs); also swamps, bayous, and ponds near rivers, and shallow creeks that are tributary to occupied rivers, sometimes including swift upland streams. Ongoing threats include habitat alteration and fragmentation, water pollution, deliberate harvest for human consumption, incidental catch by recreational fishers, and drought.	Suitable habitat is not present within the study area.
Clams			
Texas Fawnsfoot (*Truncilla macrodon*)	Proposed Threatened	Appears to prefer rivers and larger streams. Living specimens have not been documented in reservoirs suggesting intolerance of impoundment but has also been found alive in the past in flowing rice irrigation canals. It probably prefers sand, gravel, and perhaps sandy-mud bottoms in moderate flows. USFWS considered the primary threat to this species to be habitat loss and degradation from impoundments, contributing to scouring of riverbeds, sedimentation, modified stream flows, and decreased water quality.	Suitable habitat is not present within the study area.

Species	Federal Status	Habitat Requirements	Habitat Present within Ground Disturbance Study Area
Insects			
Monarch Butterfly (*Danaus plexippus*)	Candidate	In general, breeding areas are virtually all patches of milkweed in North America and some other regions. The critical conservation feature for North American populations is the overwintering habitats, which are certain high altitude Mexican conifer forests or coastal California conifer or Eucalyptus groves. Overwintering habitats in Mexico are primarily in a few hectares or less each and have been under pressure from logging, agricultural and urban development.	Suitable habitat is not present within the study area. Proposed project is not likely to jeopardize the continued existence of this species.

A list of the 40 rare, threatened, or endangered species that the TPWD considers as having the potential to occur in Collin County can be found in **Appendix E**. Habitat descriptions provided by TPWD and NatureServe in addition to species observations documented in iNaturalist were referenced to inform conclusions on suitable habitat in the study area. Based on available habitat, there is potential suitable habitat for the following Species of Greatest Conservation Need (SGCN): Woodhouse's toad (*Anaxyrus woodhousii*), Sprague's pipit (*Anthus spragueii*), big brown bat (*Eptesicus fuscus*), eastern red bat (*Lasiurus borealis*), tricolored bat (*Perimyotis subflavus*), and eastern box turtle (*Terrapene carolina*). BMPs suggested by TPWD to protect these species during construction are outlined in the Mitigation and BMPs under **Section 4.2.2**.

In addition to federal and state lists, the TPWD Texas Natural Diversity Database (TXNDD) was reviewed for geographic information on rare, threatened, and endangered plants, animals, invertebrates, exemplary natural communities, and other significant features. Based on the TXNDD search, six Source Features and six Element Occurrence areas were identified within 10 miles of the study area. Source Features (SF) refer to individual records of observations, while Element Occurrences (EO) refer to broader populations. SF records for the common garter snake (*Thamnophis sirtalis*), Texas garter snake (*Thamnophis sirtalis annectens*), and Woodhouse's toad were identified, as well as EOs for the western hog-nosed skunk, the eastern spotted skunk, and three unique vegetation communities. The study area directly intersects the EO for the western hog-nosed skunk (*Conepatus leuconotus*) and the eastern spotted skunk, indicating the potential presence of these species. None of the SF or EO records of species within 10 miles of the study area are listed as threatened or endangered by either USFWS or TPWD.

4.2.2 Environmental Consequences and Mitigation

Direct Impacts

No Action Alternative

The No Action Alternative would not directly or indirectly impact fish, wildlife, or plant species within the study area as no habitat will be altered.

Proposed Action

The Proposed Action would result in approximately 240 acres of land clearing to accommodate all proposed improvements, and tree removal is anticipated. Therefore, permanent impacts to

biological resources, including vegetation and potential breeding and/or foraging habitat for wildlife, are unavoidable.

Impacts to biological resources from construction activities include the destruction/alteration of habitat, the disturbance of individuals or local populations of fish, wildlife, and plants, and the potential introduction of invasive species. No invasive species are expected to be introduced as a result of the proposed action; however, the unintentional spread of invasive species could occur at construction sites if equipment is not properly cleaned prior to entering and exiting the site or if existing invasive plants are mowed during construction. Impacts to biological resources during construction can be minimized by utilizing the proper BMPs recommended by TPWD, TCEQ and FAA, as outlined in the Mitigation and BMPs section, see **Section 8.0**.

Permanent impacts related to the Proposed Action include the permanent alteration of existing streambeds. Ground disturbance is proposed in 4 locations within stream OHWMs where culverts will be constructed below proposed roadways. This action would permanently disrupt portions of the riparian zone along these streams, which would require vegetation removal and may disorient wildlife. Discussed in **Section 4.12**, stormwater detention will be included in the improvements to ensure that the discharge of stormwater to streams in the study area does not increase, thereby preserving current stream morphology. The Proposed Action would not introduce any bio-accumulative materials into stream systems that would harm aquatic organisms.

Other potential construction and operational impacts may result due to increases in pollution such as noise, light, and waste. The increase of noise and human activity may deter wildlife from forested areas in the study area, causing fragmentation from the biotic community east of TKI. A noise analysis allows for an assessment of the potential impacts on these noise-sensitive species. Refer to **Section 4.9** for further discussion of noise impacts. The increase of artificial light in the study area resulting from the Proposed Action may impact wildlife activity by disrupting day/night patterns or reproductive cycles and attracting or repelling organisms. The attraction of species to the study area by artificial light could result in an increase of wildlife fatalities by aircraft and vehicle strikes or could disrupt ecosystem balance by concentrating populations in a single area. Light pollution that repels organisms from the study area would act as a form of habitat loss, fragmenting species from an area that they would have previously inhabited. Refer to **Section 4.11** for further discussion of light sources at the airport and those included in the Proposed Action. Additional potential impacts include those that would occur during an accidental spill of fluids, assuming an accident is sufficiently likely as to not be speculative, and such an accident could result in the disturbance or death of individual fish, wildlife, or plants. The airport maintains a spill prevention plan to address these incidences and is further discussed in the hazardous materials section of the EA, see **Section 4.6**.

Indirect Impacts

As a result of the Proposed Action, aircraft activity will increase at TKI, resulting in a greater number of flights and therefore a higher risk of bird fatalities from airborne strikes. According to the FAA Wildlife Strike Database, 148 wildlife strikes by aircraft have been recorded since 1992. The number of strikes reported per year, the majority of which affected birds, is expected to increase with expanded operations. A Wildlife Hazard Management Plan would be updated by the airport in accordance with AC 150/5200-33C and as required for Part 139 certificated airports to minimize potential avian bird strikes and other wildlife effects. The plan and additional

measures would be included as part of the process to implement commercial services at the airport. The airport will conduct and install all required management protocols and mitigation measures in compliance with federal regulations.

Wildlife fatalities may increase at stream crossing locations. Small mammals and reptiles could attempt to cross the proposed roadway if they do not use the installed culverts, resulting in impacts with airport traffic.

Mitigation and BMPs

Precautions will be taken to avoid impacts to SGCN and natural plant communities during construction, operation, and maintenance. Site design would minimize the removal of vegetation and native habitats to the extent practicable. During revegetation, seeding and sodding will be constructed in accordance with state specifications and local soil and climate conditions. As protection measures for birds and other wildlife, the amount of night-time lighting needed for safety and security at the site will be minimized to the extent practicable and in accordance with lighting design standards. As recommended by TPWD, employees and contractors will be informed of potential SGCN in the project area. Wildlife observed during construction, operation, and maintenance will be allowed to safely leave the site.

Best Management Practices (BMPs) implemented to protect water quality will aid in protecting habitat within and adjacent to streambeds in the project area. Disturbances to microhabitats in waterways will be avoided to the fullest extent practicable for any construction that occurs within or nearby streams in the project area. Water resources in the study area and water quality BMPs are further outlined in **Section 4.12**.

Regarding migratory birds, the project will avoid removal and destruction of active bird nests except through federal or state approved options. As recommended by TPWD, a nest survey will be performed between March 15 to September 15, occurring one week prior to construction to ensure that no nests with eggs or young will be impacted by construction.

The City of McKinney Tree Ordinance, Section 146-136 – Landscape and Tree Preservation requires a permit and mitigation to remove protected trees within the city limits of McKinney. However, since the airport is a part of the City, a tree survey and tree preservation plan (mitigation) are not required. A tree removal application will be required to be sent when development plans are submitted to the City.

4.3 Climate

In accordance with the CAA and Executive Order (EO) 13514, a qualitative and quantitative analysis of greenhouse gas (GHG) emissions was performed for the Proposed Action and is detailed in **Appendix C**. According to the Intergovernmental Panel on Climate Change (IPCC), the aviation industry contributes approximately 4.1 percent of the world's GHG emissions. The Council on Environmental Quality (CEQ) developed guidance on reporting GHG emissions in NEPA documentation. Due to uncertainties in accurately predicting the timing, magnitude, and location of aviation's climate impacts, FAA has not identified significance thresholds. However, minimizing GHG emissions and identifying potential future impacts of climate change remain key to encouraging a sustainable national airspace system.

4.3.1 Affected Environment

The study area for evaluating GHG is regional including the greater Dallas-Fort Worth area and Collin County, where the airport is located. According to Collin County's 2022 Hazard Mitigation Action Plan, measures have been planned for the county to adapt to impacts resulting from climate change, such as an increased frequency of wildland fires, heat waves, tornadoes, winter storms and flood events. TKI was identified as a critical infrastructure facility in the plan. As discussed in the Air Quality section, the Dallas-Fort Worth area, including Collin County, is a nonattainment area for ozone. Emissions of other particulates and NAAQS are within EPA's criteria.

4.3.2 Environmental Consequences and Mitigation

No Action Alternative
The No Action Alternative would not change the current or projected GHG emissions for TKI. Aircraft that could not be accommodated as a result of selecting the No Action Alternative would likely continue service to the other existing airports in the DFW area where emissions would continue to increase along with increased services.

Proposed Action
To evaluate the effects of climate change on a proposed action, two subjective qualitative assessments were performed: (1) the impact of climate change on a proposed action, and (2) the impact of climate change on the action's environmental impacts to address the latest CEQ guidance on GHG and Climate. Assessments at the state and local levels were conducted for addressing the potential impacts on climate change from the Proposed Action.

There are no defined significance thresholds for aviation GHG emissions, nor has FAA identified any factors to consider in making a significance determination for GHG emissions. Any increases in GHG emissions from construction associated with the Proposed Action would be temporary and essential for implementation of the Proposed Action. Increases in operational emissions would be higher than the No Action and would comprise a small portion of the City of Dallas 2015 GHG community emissions of 20,364,604 metric tons of carbon dioxide equivalents (MTCO2e), the US-based emissions of 6,472 million metric tons CO2e, and even less than the 49 gigatons of carbon dioxide equivalent global GHG emissions.[8, 9, 10] It should be noted that the federal Airline Deregulation Act of 1978 prohibits a state or local government's regulation of an air carrier's rates, routes, or services, the airport does not have the authority to mitigate air pollutant emissions associated with aircraft operations. However, the FAA has developed the Aviation Climate Action Plan[11] and the Net Zero Sustainable Aviation System to address GHG and climate change and mitigate impacts.

It should be noted that for this EA, the best available science, data, and rationale for the GHG analysis is based on the interim guidance. FAA's guidance/policy will evolve and change going into the future.

[8] https://www.dallasclimateaction.com/ghg-inventory
[9] https://www.epa.gov/sites/production/files/2019-02/documents/us-ghg-inventory-2019-main-text.pdf
[10] http://ipcc.ch/publications_and_data/ar4/syr/en/contents.html
[11] 2021 United States Aviation Climate Action Plan (faa.gov)

Mitigation

Additional coordination with TCEQ would be required to determine potential mitigation and other measures. The effects on climate and GHG emissions would be further minimized through the implementation of BMPs and sustainability measures built into the design of the Proposed Action. In addition, the new facility would meet current building codes and energy efficiency requirements of windows and heating, ventilation, and air conditioning (HVAC). The covered parking canopies would have solar panels attached that would produce approximately 3 MW of clean renewable energy. The building would only need around 1.4 MW; therefore, the solar farm would create a surplus of approximately 1.6 MW of clean renewable energy that would be sold back to the utility company, thereby avoiding purchasing electricity from the grid which is associated with higher GHG due to fossil fuel being used to generate electricity from the grid. These GHG emission reductions from the solar farm were not estimated for this analysis and were not accounted for in the operations GHG emissions as avoidance or offset emissions. Therefore, GHG emission reductions from the solar farm once estimated would help mitigate GHG emissions from the Proposed Action over the life of the project which is typically 20 to 25 years.

4.4 Department of Transportation Act, Section 4(f)

Section 4(f) of the Department of Transportation Act of 1966 (codified at 49 U.S.C. § 303) protects against the loss of significant publicly owned parks and recreation areas, publicly owned wildlife and waterfowl refuges, and publicly or privately owned historic sites as a result of federally funded transportation projects.

The Section 4(f) regulations specifies that it protects “public” parks, and that such parks must be publicly owned, but does not elaborate on what constitutes a “public” park. FAA’s Desk Reference to 1050.1F refers the reader to the Federal Highway Administration’s regulations and guidance.

The FAA also uses Federal Highway Administration/Federal Transit Administration (FHWA/FTA) regulations in 23 CFR part 774 (73 Federal Register 13368 [March 12, 2008] and 73 Federal Register 31609 [June 3, 2008]) and FHWA guidance (e.g., Section 4(f) Policy Paper, 77 Federal Register 42802 [July 20, 2012]). These requirements are not binding on the FAA; however, the FAA may use them as guidance to the extent relevant to aviation projects.

4.4.1 Affected Environment

Proposed projects that require the “use” of such lands, including “constructive use,” shall not be approved unless there is no “feasible and prudent” alternative, and the project includes all possible planning to minimize the harm from such use. “Constructive use” of lands occurs when “a project’s proximity impacts are so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired. Substantial impairment occurs only when the protected activities, features, or attributes of the Section 4(f) property that contribute to its significance or enjoyment are substantially diminished.” (FAA Order 1050.1F).

The City of McKinney has three public parks within 1.5 miles of the Airport – Cottonwood Park located at 212 McMakin Street (west of the study area), Mouzon Park located at 1307 E. Greenville Avenue (northwest of the study area), and Fitzhugh Park located at 700 Fitzhugh

Street (northwest of the Airport). In addition, there are four areas owned by the City and zoned as (but not developed or used as) park (north of the study area) (McKinney, 2017a). Approximately 370 acres to the north of the airport is owned by the City of McKinney and currently zoned as park. This area has not been developed as a park or recreational area. This area is also not currently open to the public. This area is not eligible for protection under Section 4(f) because it is not open to the public and not identified as significant.

There are no Wildlife Management Areas located within Collin County, but the Heard Natural Science Museum and Wildlife Sanctuary (Heard Museum), is located in McKinney, Texas. The Heard Museum is not protected under Section 4(f) because this site is privately-owned and managed by a nonprofit organization, and fees are required for admission. The property is approximately one mile southwest of the study area and not directly adjacent to TKI. The proposed action would not directly impact the land and use of the property, not change access to visitors, and would not alter wildlife habitat on this site. Other resource studies, such as the noise analysis discussed in Section 4.9, determined the proposed project would not result in impacts to this site.

The National Register of Historic Places (NRHP) is the Nation's official list of cultural resources worthy of preservation. Properties listed in the NRHP include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. A review of the NRHP indicates that no NRHP-listed sites are located on the study area per coordination with THC in 2023.

4.4.2 Environmental Consequences and Mitigation

No Action Alternative
The No Action Alternative would not result in impacts to any Section 4(f) sites because no construction would occur.

Proposed Action
The Proposed Action would not result in adverse effects to Cottonwood Park, Mouzon Park, and Fitzhugh Park. Cottonwood Park, Mouzon Park, and Fitzhugh Park are not located adjacent to the airport, are not within the direct takeoff and landing path of the airport, and proposed airport improvements would not extend to these areas. These areas are not within the Day Night Average Sound Level (DNL)[12] 65 dB noise contours. Noise impacts are not anticipated for these sites and projected noise levels from the proposed project would be compatible to the land use.

The Proposed Action would not extend into the 370-acre area north of the airport and owned by the City of McKinney. Although potential noise contours of DNL 65 dB would cross this area, none of this area has been developed as a park and is not currently open to the public; however, any future development in this area would be coordinated with city officials regarding possible future noise impacts from the Proposed Action. The property is fenced with secure gates and no signage indicating the area is a park, and no parking lot, no recreational areas currently exist. The City leases a portion of this property for agricultural use. The area has never

[12] The Day Night Average Sound Level (DNL or Ldn) noise metric is used to reflect a person's cumulative exposure to sound over a 24-hour period and takes into account the amount of noise from each aircraft operation as well as total number of operations flying throughout the day. (Source: FAA, https://www.faa.gov/faq/what-dnl-and-why-does-faa-use-it).

been developed or used as a park. This area is not eligible for protection under Section 4(f) because it is not open to the public and not identified as significant.

Indirect Impacts
No indirect effects to these sites are anticipated as a result of the Proposed Action.

Mitigation and BMPs
No impacts to Section 4(f) sites are anticipated; therefore, no mitigation measures are required or proposed.

4.5 Farmlands

The Federal Farmland Protection Policy Act (FPPA) defines prime farmland as "land that has the best combination of physical and chemical characteristics for producing food, feed fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel fertilizer, pesticides, and labor…" (7 CFR Section 4201(c)(1)(A)). Such lands have the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops economically, when treated and managed (including water management), according to acceptable farming methods.

4.5.1 Affected Environment

The project APE borders land in urban and nonurban use, and over 50 percent of land within a radius of 1.0 mile from the project can be considered as nonurban use. To determine if prime farmland is located within the study area, the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS) was reviewed. The WSS depicts the following mapped soils as prime farmland: Burleson clay, 0 to 1 percent slopes (BcA), Burleson clay, 1 to 3 percent slopes (BcB), Houston Black clay, 0 to 1 percent slopes (HoA), Houston Black clay, 1 to 3 percent slopes (HoB), and Lewisville silty clay, 1 to 3 percent slopes (LeB). According to the WSS, prime farmland accounts for approximately 227.2 acres, or 92.5 percent, of the project APE. However, portions of the HoA and HoB areas have been previously disturbed, graded, and leveled during the construction of the existing runway alignment, airport service roads and FM 546. The remaining land mapped as prime farmland has been owned by the City since 2018, and no evidence of farming (managed for a scheduled harvest or timber activity) has been observed in these areas in the 10 years prior to this assessment. The mapped soils are identified and included in **Appendix F**.

4.5.2 Environmental Consequences and Mitigation

No Action Alternative
Under the No Action Alternative, no impact to farmlands would occur.

Proposed Action Alternative
The Proposed Action would result in an approximately 126-acre decrease in prime farmland by direct conversion and an approximately 15-acre decrease in prime farmland by indirect conversion. Direct conversion refers to acres where proposed facilities will be constructed, while indirect conversion refers to open/undeveloped areas where facilities will not be constructed but will be considered unfarmable as they are within airport property where access is restricted. Form AD-1006 was submitted to NRCS in May 2023. The Proposed Action received a total site assessment score of less than 160 points based on the rating system performed; therefore, the

consideration of alternatives under the Farmland Protection Policy Act is not necessary. No further coordination with NRCS is required. The Form AD-1006 is provided in **Appendix F**.

4.6 Hazardous Materials

Federal actions require consideration of hazardous material, solid waste, and pollution prevention impacts in NEPA documentation. Principal laws regulating the handling and disposal of hazardous materials, substances, and wastes that apply to FAA under guidance in Order 1050.1F include the Resource Conservation and Recovery Act (RCRA), as amended by the Federal Facilities Compliance Act of 1992; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA or Superfund); the Community Environmental Response Facilitation Act of 1992; the Pollution Prevention Act of 1990; and the Toxic Substances Control Act of 1976 (TSCA), as amended.

4.6.1 Affected Environment

The study area for hazardous materials is considered the direct study area as shown in **Appendix A: Study Area Map** to up to one mile outside of the direct study area to comply with American Society for Testing and Materials (ASTM) standards. Environmental risks were analyzed for the Proposed Action within search radii established by the ASTM for hazardous sites.

The existing fuel farm at TKI is located west of Runway 36, directly north of the Collin County Hangar Owners Association hangars. The farm holds 10 tank pads, four of which are currently occupied by one 25,000-gallon Jet-A tank, one 12,000-gallon Avgas tank, and two 15,000-gallon Jet-A tanks. A self-service fuel island supported by one 1,000-gallon Avgas tank and one 1,000-gallon Jet-A tank is located north of the fuel farm, directly south of the Monarch Air hangar on the aircraft apron.

The airport meets the oil storage capacity and other requirements listed in 40 CFR Part 112, and, as such, has prepared and implemented a Spill Prevention Control and Countermeasures (SPCC) plan. Aviation fuel and other oil products controlled by TKI on airport property are subject to SPCC regulations. All above-ground storage tanks (AST) at the airport have concrete secondary containment, and all fuel trucks have absorbent booms, sorbent materials, and berms to control potential discharges. Evacuation of containment fluids is completed under responsible supervision. In addition, the airport owns, operates, and maintains two used oil collection stations. There are no underground storage tanks (UST) on airport property. TKI makes every reasonable effort, through routine inspections, record-keeping, and proper training, to ensure that airport staff is aware of and follows appropriate regulations.

A review was conducted of an environmental database report obtained from Environmental Risk Information Services (ERIS) that provides a government records review for the study area. The radius map indicates no hazardous sites occurring directly within the study area, and 11 other surrounding sites within ASTM search distance criteria relative to the study area. No unplottable records were found that may be relevant to the study area. The database report is provided in **Appendix G**. The records review is summarized in **Table 5**.

Table 5. Environmental Database Report Sites

Map ID	Site Name	Address	Source Type	Relative Elevation & Distance from Study Area	Status	Environmental Risk
1	N/A	1971 FM 546 Road	ERNS	Lower, 27 feet ESE	In 2008, 145 gallons of materials (non-PCBs) from a pole mounted transformer spilled onto the ground and into a storm drain connecting to the intermittent tributary fork of East Trinity River. The spill was contained and secured by deploying blooms.	Low
2	TXI Operations LP	1825 FM 546	AIR PERMITS	Lower, 221 feet S	Effective air permit application for a concrete batch plant. The facility described in the EDR does not appear to be located at 1825 FM 546 or in the vicinity of the study area. The listed address may represent a mailing address.	None
3	City of McKinney – Area 1	Multiple Addresses	FED BROWNFIELDS	Higher, 474 feet SSW*	The addresses listed in the EDR indicate that the area is approx. two miles northwest of the study area.	Low
	City of McKinney – Area 2	Multiple Addresses	FED BROWNFIELDS	Higher, 474 feet SSW*	The property description in the EDR appears to place this facility approx. 1.75 miles NW of the study area.	Low
	Cotton Mill – Area 2	Multiple Addresses	FED BROWNFIELDS	Higher, 474 feet SSW*	The property description in the EDR appears to place this facility approx. 1.5 miles W of the study area.	Low
	Cotton Mill – Area 3	Multiple Addresses (undefined)	FED BROWNFIELDS	Higher, 474 feet SSW*	The structures described in the EDR do not appear to be SSW of the study area as reported and do not appear to be in the immediate vicinity of the study area based on current and historical aerial imagery.	None

	McKinney Housing Authority	Multiple Addresses	FED BROWNFIELDS	Higher, 474 feet SSW*	The property description in the EDR appears to place this facility approx. 1.5 miles NW of the study area.	Low
	McKinney Housing Authority – Lloyd Owens	Multiple Addresses	FED BROWNFIELDS	Higher, 474 feet SSW*	The property description in the EDR appears to place this facility approx. 1.75 miles NW of the study area.	Low
	McKinney Housing Authority – Newsome	Multiple Addresses	FED BROWNFIELDS	Higher, 474 feet SSW*	The property description in the EDR appears to place this facility approx. 1.5 miles NW of the study area.	Low
4	TM Cypress Products, LLC	2935 Almeta Lane	SSTS	Lower, 566 feet ESE	Registered pesticide producer. Pesticides emit hazardous air pollutants (HAPs) and volatile organic compounds (VOCs). In addition, spills of pesticide product during transport could be carried by runoff and potentially contaminate surface waters in the study area. There have been no violations associated with this site.	Low
5	Wingspoint Aviation	1500 E Industrial	HIST TANK	Higher, 691 feet WNW	Data on the historical tank construction notification was received in 2004. No additional information on this entry was reasonably ascertainable.	Low

ERNS *– Federal Emergency Response Notification System*
AIR PERMITS *– New Source Review (NSR) State Permits*
FED BROWNFIELDS *– The Assessment, Cleanup and Redevelopment Exchange System (ACRES) Brownfield Database*
SSTS *– Federal Toxics Program Registered Pesticide Establishments*
HIST TANK *– State and Tribal Registered Underground Storage Tank (UST) and Aboveground Storage Tank (AST) Historical Tank Construction Notification*
** Relative elevation and site distance listed in database report is inaccurate following review of aerial imagery and publicly available data.*

A Phase I Environmental Site Assessment (ESA) was performed in 2018 for the study area that concluded there was no evidence of Recognized Environmental Conditions (RECs), Controlled RECs, or Historical RECs that would warrant further investigation prior to development of the site. The results of the ERIS database report in Table 3 concur with these findings. Refer to **Appendix G** for a copy of the Phase I ESA.

The airport generates typical industrial, construction, and municipal solid wastes that are disposed of and recycled through Waste Connections Inc. Solid waste is disposed of at the McKinney Landfill, approximately eight miles northeast of the airport.

The airport accomplishes pollution prevention through the implementation of a site-specific SPCC, industrial SWPPP, and individual National Pollutant Discharge Elimination System (NPDES) permit. In general, typical sources of potential pollution at the airport include aircraft deicing, aircraft fueling, aircraft lavatory services, building and grounds maintenance, construction areas, equipment cleaning/degreasing, equipment fueling, equipment storage, fuel storage, and salt/sand storage/usage. TKI follows spill response procedures that meet TAC 327.5(a) requirements. These response procedures apply to all spills, leaks, or discharges of oil, petroleum products, and other hazardous substances at TKI. Spills of all sizes are reported to the McKinney Fire Department, airport administration, and the McKinney Air Center. The airport's Aircraft Rescue and Fire Fighting (ARFF) station is located along the main entrance to the airport, at 1401 Industrial Blvd (McKinney Fire Station #4). A new ARFF station will not be established as part of the Proposed Action.

4.6.2 Environmental Consequences and Mitigation

No Action Alternative
Under the No Action Alternative, no impact to hazardous materials, solid waste, or pollution prevention would to occur. TKI would continue to operate its facilities in compliance with the same regulations associated with transport, storage, and use of existing hazardous materials as it does today. No increase in stormwater runoff or pollution would be expected by the No Action Alternative. Deicing and fueling operations would continue to occur as they have, which have the potential to affect downstream receiving waters in the event of a spill or if unrecovered fluid enters stormwater.

Proposed Action
Direct Impacts
The Proposed Action would require that additional fuel systems be installed within the study area. It is not anticipated to introduce new regulated substances not currently utilized by the airport.

The existing fuel farm at TKI would provide short-term fueling operations for the Proposed Action. A long-term fuel farm is ultimately proposed as part of the airside improvements, however additional evaluations of layout, logistics, costs, capacity, and demand will be required prior to its implementation. In the meantime, the installation of an additional fuel storage tank is anticipated to be necessary to accommodate the larger quantities of fuel to be consumed. For the basis of design purposes, it has been assumed that a 30,000-gallon AST will be installed adjacent to the ASTs at the existing fuel farm. The installation would include a foundation, bollards, and all modifications to the existing secondary containment area to accommodate the

new tank. The existing fuel farm is comprised of existing tanks and vacant pads on a paved, maintained area west of the airfield, allowing for accommodations for an additional AST. It is assumed that the new AST can be installed within the existing fuel farm area without significant impacts to the concrete driveway area.

Long-term fueling operations will include constructing a new fuel farm adjacent to the proposed terminal building. An area of land south of the terminal apron will be reserved for the future fuel facility. Fuel will be transported to the aircraft through fuel trucks or a series of underground piping and hydrant pits at each gate position. The addition of fuel systems would pose an increased risk of surface water contamination in the event of a spill or if unrecovered fluid enters stormwater.

Short-term and temporary impacts will occur as a result of construction activities for the Proposed Action. The demolition of existing structures will not be necessary; however, approximately 240 acres of ground disturbance will be required to implement the Proposed Action. During construction grading activities, the primary potential pollutant is sediment and silt entering stormwater and receiving waters at the airport. Sediment-laden runoff can transport fluids from construction equipment, adhesives, paints, cleansers, masonry, cement, fertilizers, pesticides, and wastes from electrical, plumbing, heat, and air conditioning installations, all of which may diminish water quality and harm biotic communities on airport property or downstream of the airport. Proper implementation of BMPs at the construction site will aid in minimizing impacts to receiving waters. Refer to **Mitigation and BMPs** subsection for discussion on mitigation and BMPs for hazardous materials impacts.

Indirect Impacts

Indirect impacts associated with increased fuel storage and other regulated substances due to proposed increased aircraft capacity would occur. The Proposed Action will result in additional municipal solid waste by the operation of the new terminal and would include residual trash or garbage generated by passengers and staff. Solid wastes would be collected and disposed of according to current guidelines. No problems are anticipated to meet applicable Federal, state, and local regulations regarding solid waste management or disposal.

With an increased volume of fuel required on-site due to the Proposed Action, the potential for spills poses an indirect impact contingent on proper handling of petroleum products. During short-term fueling operations, fuel will be regularly transported to and from the existing fuel farm and the proposed terminal apron. With increased volume and larger vehicle loads anticipated on the existing vehicle service road around Runway 36, the potential for spills, leaks, or discharges of fuel at the airport will temporarily increase. During long-term fueling operations, fuel will be transported to the aircraft through fuel trucks or a series of underground piping and hydrant pits at each gate position. The addition of fuel systems would pose an increased risk of surface water contamination in the event of a spill or if unrecovered fluid enters stormwater.

Aircraft de-icing operations would increase due to increased volume of aircraft at TKI. De-icing fluid contains hazardous chemical products which can affect the quality of downstream receiving waters. De-icing fluid collection and storage has been incorporated into the Proposed Action design to avoid stormwater pollution. While there remains the potential for unauthorized discharges of de-icing fluid if not properly handled, it is not anticipated to be significantly greater than the risks associated with current de-icing operations at the airport.

Mitigation and BMPs

Modifications to existing operational stormwater systems will be completed to manage stormwater drainage at the airport. The airport's existing industrial SWPPP and SPCC will be updated to ensure compliance with local, state, and Federal regulations and to reflect any changes in runoff due to the Proposed Action. Existing discharge permits will be modified as needed to ensure compliance with local, state, and Federal regulations.

Prior to initiating construction activities, TKI will obtain permit coverage under the TPDES Construction General Permit (TXR150000) for Stormwater Discharges from Large Construction Activities. As required by the permit, a site-specific SWPPP will be developed and implemented for the construction site. General construction stormwater BMPs (including silt fences, check dams, and other controls as appropriate) will be incorporated into construction plans to help prevent erosion and protect water quality in compliance with local erosion and sediment control regulations. Specific areas for construction equipment staging, maintenance, and fueling will be designated. These areas will be designed to provide appropriate secondary containment and other control measures to avoid and/or minimize potential, inadvertent, releases of fuels, oils, and other contaminants to stormwater, soil, and groundwater within the project area. Wastes associated with construction and operations at the site will be handled in accordance with the Solid and Hazardous Waste Rules and Regulations of the state. This includes all materials that would be classified as solid and/or hazardous wastes. Non-hazardous solid waste will be hauled to the McKinney Landfill, approximately eight miles northeast of the airport. To encourage the goals set forth in the 2019 Airport Master Plan, contractors are encouraged to reduce, reuse, and recycle construction and demolition waste where feasible.

Any temporary fuel tanks or the temporary storage of other regulated materials will comply with Federal, state, and local regulations. All construction materials used for the proposed project would be removed as soon as the work schedules permit. The contractor would initiate early regulatory agency coordination during project development. Should unanticipated hazardous materials/substances be encountered during construction, the airport and/or the contractor would be notified, and steps would be taken to protect personnel and the environment. Any unanticipated hazardous materials encountered during construction would be handled according to applicable federal, state, and local regulations.

The airport will require construction contractors to maintain appropriate spill prevention plans and spill kits as applicable during construction activities. The contractor would take appropriate measures to prevent, minimize, and control the spill of hazardous materials in the construction staging area. Spills would be handled in accordance with airport procedures and protocols, consistent with Federal, state, and local regulations.

The addition of any regulated substances associated with long-term operations will be stored and used in accordance with Federal, state, and local regulations.

4.7 Historical, Architectural, Archeological, and Cultural Resources

The National Historic Preservation Act of 1966 requires that an initial review be made in order to determine if any properties are on, or eligible for inclusion in, the National Register of Historic Places (NRHP). In accordance with 40 CFR 1507.2, CEQ regulations, and Section 106 of the

National Historic Preservation Act, the Texas Historical Commission (THC) was consulted early in the process through FAA.

An intensive archaeological area survey was performed on December 12–16, 2022. The study area subject to the intensive archaeological survey was localized to the APE designated east of the airport's existing runway. Additional information including survey approach and APE descriptions are provided in more detail in the Archeological Survey Report included in **Appendix H**.

4.7.1 Affected Environment

Archaeologists conducted pedestrian survey on transects spaced at 30-meter (m) intervals within the APE. Subsurface investigations included shovel testing at 100-m intervals on transects spaced at 100- m and the excavation of trenches within areas identified as having potential for deeply buried archaeological sites. Pedestrian survey, 117 shovel tests, and 10 trenches resulted in the documentation of one newly recorded archaeological site (41COL374), and one previously recorded archaeological site (41COL176). All shovel tests and trenches were negative for cultural material, and pedestrian survey was the primary method used to locate and document the archaeological sites. While all archaeological shovel tests and backhoe trenches were negative for cultural material, two archaeological sites were recorded within the study area. Site 41COL374 is a newly recorded 1900-1920 residential surface artifact scatter. No artifacts were collected, but archaeologists recorded 130 artifacts through a pedestrian survey sample. Site 41COL176 is a previously recorded late-nineteenth to mid-twentieth century residential surface scatter. Archaeologists recorded 33 artifacts through a pedestrian survey sample and no artifacts collected. AmaTerra recommended both sites as not eligible for inclusion in the National Register of Historic Places or for designation as a Texas State Archeological Landmark.

4.7.2 Environmental Consequences and Mitigation

Archaeologists conducted an intensive archaeological survey for the proposed McKinney National Airport Expansion in Collin County, Texas, see **Appendix H** for the Archeological Survey Report. The survey was conducted to comply with the Antiquities Code of Texas ([ACT] Texas Natural Resources Code, Title 9, Chapter 191), its associated regulations (13 TAC 26), as well the National Historic Preservation Act (Section 106), as amended.

No Action Alternative
Under the No Action Alternative, no impact to archeological, historical, and cultural resources would occur.

Proposed Action Alternative
The Proposed Action would also include grading and modification of the surrounding landscape with widespread impacts to 1.5 m below the surface and localized areas of deep impacts 6–23 m below the surface. The archeological survey performed in December 2022 established that no State Antiquities Landmarks or National Register of Historic Places-eligible resources are present within the study area. Based on the survey, the proposed action is not anticipated to impact archeological resources and no further archaeological work is warranted. In the unlikely event that archaeological resources are inadvertently encountered, all work should cease until

those resources can be investigated by a professional archaeologist and coordinated with the appropriate representatives of the THC.

Complying with the stipulations of the associated Antiquities Permit, all project-generated photographs, notes, and records will be permanently curated at the Center for Archaeological Studies at Texas State University, San Marcos, Texas.

4.8 Land Use

A land use analysis was performed to assess current land uses of the area and review potential effects as a result of the No Action and Proposed Action. Applicable statutes and regulations to the land use analysis include Airport and Airway Improvement Act of 1982 (49 U.S.C. § 47107), Airport Improvement Program (49 U.S.C. § 47106) and Airport Safety, Protection of Environment, Criteria for Municipal Solid Waste Landfills (40 CFR § 258.10).

4.8.1 Affected Environment

The Airport is classified as an Airport Zone by the City of McKinney's Codes of Ordinances, indicating the area is strictly designed for airports, heliports, and landing areas for other types of aircraft (Subpart B, Chapter 146, Article III, Section 146-92) (Coffman, 2018). Existing land uses within the airport include fixed based operators, terminal, maintenance, fuel farm, aircraft parking apron and hangars, auto parking, airport traffic control tower, storage, access roads, and undeveloped land consisting of maintained grassland and forested areas. The land uses adjacent to the airport are shown on the Land Use Map included in **Appendix A**. Uses include agricultural/undeveloped, single-family residential, institutional, commercial and undeveloped properties.

Evaluations of compatibility with land uses in the vicinity of an airport is usually associated with either wildlife, noise, or structure height. To minimize the potential for land use incompatibility, noise impacts are considered by entities with authority over future development, which would be the City of McKinney. Assurance of compatible land use is required under 49 U.S.C. 47107(a)(10), formerly section 511(a)(5) of the 1982 Airport Act. Nearby land uses can also pose a threat to safe aircraft operations if they contain features that attract wildlife. Such features may include wetlands, lakes, landfills, or structures within approach and departure zones.

There are streams in the north parcels that are currently undeveloped and owned by the City of McKinney. According to AC 150/5200-33C, separation criteria distances to evaluate for hazardous wildlife attractants are 5,000 feet (0.9 mile), 10,000 feet (1.9 miles), and 5 miles of the airport property. Several potential sites were identified within the separation criteria distances. Within 5,000 to 10,000 feet (0.9 to 1.9 miles), a wildlife sanctuary, Heard Natural Science Museum and Wildlife Sanctuary, is located southwest of the airport, but not directly adjacent to the airport. A corridor of undeveloped land that surround and extend along the East Fork Trinity River is located east of the airport. As shown in the Land Use Map, vacant and undeveloped properties exist near and around the airport generally located to the east of the airport. One parcel owned by the Town of Fairview is located south of the airport. The parcel is currently undeveloped, but plans include designating it for park use; however, no specific plans were identified in any town documents for Fairview. There are residential areas with the closest

being adjacent to City of McKinney property on the northwest and the southeast corners. The largest density of residential properties is to the west of the airport boundary.

4.8.2 Environmental Consequences and Mitigation

No Action Alternative
Under the No Action Alternative, no construction would occur and no changes to land use are anticipated.

Proposed Action Alternative
The Proposed Action would occur entirely within property currently owned by the City of McKinney and no property acquisitions would be required. The Proposed Action would not require use or construction within the undeveloped land north of the East Fork Trinity River, which is currently owned by the City and leased for agricultural purposes. The land owned by the City of McKinney to the east of the airport and where the proposed action would occur, is currently unused undeveloped land. As shown in the Land Use Map included in **Appendix A**, the current land use is classified as commercial by the Collin County Appraisal District. The areas as mentioned in the previous section would not be within the 65 decibel (dB) zones; therefore, these areas would not be affected and not considered incompatible land use for noise. Further details regarding noise compatible land use are discussed in **Section 4.9**. Additional land uses of concern include adjacent refuges, landfills, and other uses that attract wildlife species hazardous to aviation, and unrestricted height zoning. As mentioned in the previous section, the Heard Natural Science Museum and Wildlife Sanctuary and the East Fork Trinity River are areas located within 10,000 feet (approximately 1.9 miles) of the airport boundary and have the capacity to attract wildlife species. In addition, undeveloped and vacant properties, including the Town of Fairview parcel, are located adjacent to the airport/City of McKinney owned property. These areas are located at a distance from the runway that would not result in substantial safety concerns for wildlife and for aviation safety. As discussed in **Section 4.2.2**, Wildlife Hazard Management Plan would be developed by the airport to minimize potential avian bird strikes and other wildlife effects. Furthermore, additional commitments are discussed in **Section 8.0** to address any wildlife species effects.

4.9 Noise and Noise Compatible Land Use

Noise contours (i.e., lines of equal noise exposure, usually expressed in terms of DNL) are typically used to illustrate average daily noise exposure around an airport. Noise contours are conceptually similar to topographic contour maps. A set of concentric contours, representing successively lower DNL, usually extends away from the airport's runways. DNL contours are typically presented in 5 dB increments on a base map, with each successive contour representing a 5 dB decrease in noise exposure on an average annual daily basis. Contours developed for the EA represent DNL 65 dB, DNL 70 dB, and DNL 75 dB.

For purposes of the EA, the noise contours show areas exposed to each DNL level. It is important to recognize that a line drawn on a map does not imply that a particular noise condition exists on one side of the line and not the other. For further information on noise and its effects on people, please refer to the Noise Technical Report in **Appendix I**.

4.9.1 Affected Environment

The existing aircraft noise environment around TKI was evaluated based upon the existing condition aircraft operations and the associated airport operational characteristics. Radar data from the FAA's National Offload Program (NOP) and FAA's Operational Network (OPSNET) operational data for calendar year (CY) 2021 were used to determine the operations for the existing noise conditions. The radar data provided the aircraft fleet mix and runway use.

The fleet mix was then scaled to match the final count for CY2021 according to FAA's OPSNET data. During the existing conditions period 134,940 annual operations occurred at TKI. **Table 6** presents the annual operations modeled for the Existing Condition along with the average annual day counts.

Table 6. Existing Conditions Operations

Modeling Scenario	Air Carrier	Air Taxi	General Aviation/Military		Total
			Itinerant	Local	
Existing Annual Operations	0	9,513	42,843	82,584	134,940
Average Annual Day	0.00	26	117	226	369

Note: Totals may not match exactly due to rounding. *Source: FAA OPSNET, 1/10/2023*

Table 7 provides the average daily operations, by aircraft type that were used in AEDT for the existing conditions. The average daily number of aircraft arrivals and departures for the CY2021 Noise Contour are calculated by determining the total annual operations and dividing by 365 (days in a year). The existing conditions annual average day included 370 total operations, two percent of which occurred during the DNL nighttime hours of 10:00 p.m. to 6:59 a.m.

Table 7. TKI Modeled Annual Operations for Existing Conditions (CY 2021)

Aircraft Category	AEDT Aircraft Type	Arrivals Day	Arrivals Night	Departures Day	Departures Night	Circuits Day	Circuits Night	Total
Jet	BD-700-1A10	114.1	6.4	117.9	2.6	-	-	241.0
	CIT3	160.9	16.6	172.2	5.2	-	-	354.9
	CL600	557.6	35.7	569.0	24.2	-	-	1,186.5
	CL601	290.2	9.7	288.0	11.9	-	-	599.8
	CNA500	76.6	-	75.2	1.4	-	-	153.2
	CNA510	193.8	13.8	200.5	7.1	-	-	415.3
	CNA525C	594.7	39.6	623.5	10.8	-	-	1,268.6
	CNA55B	1,453.7	71.3	1,489.7	35.2	-	-	3,049.9
	CNA560U	315.8	14.0	320.2	9.7	-	-	659.8
	CNA560XL	542.8	16.6	545.6	13.8	-	-	1,118.8
	CNA680	571.1	10.7	581.9	-	-	-	1,163.8
	CNA750	615.6	24.6	613.7	26.5	-	-	1,280.5
	ECLIPSE500	810.7	20.4	810.7	20.5	-	-	1,662.2
	EMB145	292.6	16.4	302.2	6.8	-	-	618.0
	FAL20	98.4	67.1	158.9	6.6	-	-	331.0
	FAL900EX	442.2	45.0	479.6	7.6	-	-	974.5

Aircraft Category	AEDT Aircraft Type	Arrivals Day	Arrivals Night	Departures Day	Departures Night	Circuits Day	Circuits Night	Total
	G650ER	35.2	-	35.2	-	-	-	70.4
	GIV	91.6	-	91.6	-	-	-	183.3
	GV	143.5	2.6	146.0	-	-	-	292.1
	GIIB	63.8	6.4	66.0	4.2	-	-	140.4
	IA1125	226.9	11.5	215.7	22.6	-	-	476.7
	LEAR35	745.4	54.5	774.2	25.8	-	-	1,599.9
	MU3001	133.1	2.6	135.7	-	-	-	271.4
Non-Jet	BEC58P	1,031.1	24.2	1,022.4	32.9	-	-	2,110.5
	CNA172	2,901.5	116.5	2,899.5	118.6	53,837.5	-	59,873.6
	CNA182	809.0	15.3	817.8	6.5	2,326.3	-	3,975.0
	CNA206	100.9	2.6	103.4	-	-	-	206.8
	CNA20T	35.7	-	35.7	-	-	-	71.5
	CNA208	698.7	37.1	706.8	29.0	-	-	1,471.5
	CNA441	149.9	2.6	152.4	-	-	-	304.9
	COMSEP	2,469.8	74.8	2,454.9	89.7	-	-	5,089.1
	DHC6	1,954.5	427.5	2,107.0	275.0	-	-	4,764.0
	EC130	46.8	18.3	53.5	11.7	-	-	130.3
	GASEPF	392.6	56.1	429.0	19.7	-	-	897.3
	GASEPV	3,465.6	126.4	3,451.3	140.7	9,305.2	-	16,489.2
	PA28	1,798.9	71.1	1,824.5	45.5	17,115.0	-	20,855.0
	PA30	263.3	31.4	286.4	8.3	-	-	589.4
Total		**24,688.7**	**1,489.3**	**25,157.8**	**1,020.2**	**82,584.0**	**-**	**134,940.0**

Note: Totals may not match exactly due to rounding. *Source: Casper, FAA OPSNET, HMMH 2022*

4.9.2 Environmental Consequences and Mitigation

The 2026 Proposed Action DNL 65 dB contour is larger than the No Action DNL 65 dB contour primarily along the extended runway centerline north and south of the airport. This results in a larger area with potential noise levels over 65 dB. There is an increase in the DNL 65 dB contour area of approximately 119 acres; however, the number of people exposed to a DNL 65 dB or greater noise level remains unchanged because the additional area is composed of undeveloped land without a residence or sensitive noise site.

Table 8 provides a summary of changes between the 2026 No Action and Proposed Action DNL 65 dB contours. The 2026 Noise Contour Map included in **Appendix A** provides a comparison of the DNL 65 dB contours for each of the 2026 alternatives and shows the grid points that would see a significant or reportable change in DNL when comparing the modeling results for the 2026 No Action Alternative and 2026 Proposed Action.

With the addition of commercial service by the Boeing 737-800, there are grid points within the Proposed Action DNL 65 dB contour which indicates a significant noise increase over the airport and outside of the airport. However, none of these areas are over noncompatible land use. There are areas to the south of the airport with residential land use exposed to a reportable noise impact due to the Proposed Action.

Table 8. Summary of Changes with the 2026 No Action and Proposed Action DNL 65 dB Contour

DNL > 65 dB	No Action	Proposed Action	Difference
2020 Population	0	0	0
2020 Housing Units	0	0	0
Acres	345.95	465.05	119.10
Noise Sensitive Sites	0	0	0

The 2031 Proposed Action DNL 65 dB contour is larger than the 2031 No Action DNL 65 dB contour primarily along the extended runway centerline north and south of the airport. This results in a larger area with potential noise levels over 65 dB. There is an increase in area of approximately 170 acres; however, the number of people exposed to a DNL 65 dB or greater noise level remains unchanged because the additional area is composed of undeveloped land without a residence or sensitive noise site.

Table 9 provides a summary of changes between the 2031 No Action and Proposed Action DNL 65 dB contours. The 2031 Noise Contour Map included in **Appendix A** provides a comparison of the DNL 65 dB contours for each of the 2031 alternatives and shows the grid points that would see a significant or reportable change in DNL when comparing the modeling results for the 2031 No Action Alternative and 2031 Proposed Action Alternative. With the addition of commercial service by the Boeing 737-800, there are grid points that indicate a significant noise increase over the airport and outside of the airport. There are areas to the north and south of the airport with residential land use exposed to a reportable noise impact due to the Proposed Action.

Table 9. Summary of Changes with the 2031 No Action and Proposed Action DNL 65 dB Contours

DNL > 65 dB	No Action	Proposed Action	Difference
Population	0	3	3
Housing Units	0	1	1
Acres	352.90	523.40	170.50
Noise Sensitive Sites	0	0	0

Construction noise would temporarily increase sound levels in the immediate vicinity of construction and land clearing. Pile driving, pavement removal, and grading operations would create the most noise, with such equipment generating noise levels as high as 75 dB to 95 dB within 50 feet of its operation. Distance rapidly diminishes noise levels, so depending on the distance from the site, area residents would likely experience some increase in noise during construction hours. The closest residential receptor is approximately 1,500 feet from the proposed project. The potential noise impact associated with the operation of on-site machinery would be temporary and can be reduced using construction timing and staging. To further minimize potential noise, construction equipment would be maintained to meet manufacturers' operating specifications.

Impacts related to the delivery of materials may be minimized by requiring that the contractor use designated haul routes that directly connect to the Airport and avoid residential and other

noise-sensitive areas. Overall, construction noise is expected to have a minor and temporary impact, and no permanent impact, to noise-sensitive land or facilities.

Mitigation

There are projected to be no housing units or noise sensitive sites within the Proposed Action DNL 65 dB contours for 2026 or 2031. Therefore, no mitigation is proposed or required for these areas.

4.10 Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks

This evaluation includes assessment of potential socioeconomic impacts resulting from the proposed action in accordance with applicable rules and regulations. Executive Order 12898, Federal Action to Address Environmental Justice (EJ) in Minority Population and Low-Income Populations, and DOT Order 5610.2(a), Actions to Address Environmental Justice in Minority Population and Low-Income Populations (USDOT, 2012), require FAA to identify and address disproportionately high and adverse potential impacts on these populations. FAA Order 1050.1F, also describes the socioeconomic impacts associated with relocation or other community disruptions, including changes to transportation, planned development, and employment. According to Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks* (USEPA 1997), federal agencies must identify and assess environmental health and safety risks that may disproportionately affect children.

As directed by EO 12898, the demographic profile of the surrounding area is collected and evaluated as part of the EJ analysis. Low-income is defined as a household income at or below the Department of Health and Human Services (DHHS) annual poverty guidelines. The 2023 DHHS poverty guideline for a four-person family is $30,000 and is used for the purposes of this analysis. EO 12898 defines a minority population as any readily identifiable groups of minority persons who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who would be similarly affected by a proposed program, policy, or activity. DOT Order 5610.2 defines minority as a person who is: (1) Black (a person having origins in any of the black racial groups of Africa); (2) Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American, or Spanish culture or origin, regardless of race); (3) Asian American (a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); or (4) American Indian and Alaskan Native (a person having origins in any of the original peoples of North America and who preserves cultural identification through tribal affiliation or community recognition). Furthermore, CEQ's definition of minority population states that: 1) the minority population of an affected area exceeds 50 percent; or 2) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate geographic analysis. In addition, a minority population also exists if there is more than one minority group present and the minority percentage, when calculated by aggregating all minority persons, meets one of the above thresholds.

4.10.1 Affected Environment

A community study area was defined as an area of five miles from the City of McKinney owned airport boundary. Demographics were compiled for the entire study area at the census block

and block group levels as well as the city and county levels for comparison purposes in keeping with the CEQ definition of minority populations. For that purpose, census data was compiled for Collin County and the cities and towns within the 5-mile study area, including Allen, Fairview, Lowry Crossing, Lucas, McKinney, Melissa, New Hope and Princeton. Socioeconomic data was also gathered at the metropolitan statistical area for data requiring more of a regional overview for the economic assessment and analysis.

Existing Area Economic Conditions

Data from the U.S. Bureau of Labor Statistics (BLS) and the Bureau of Economic Analysis (BEA) were used to gather information about the existing conditions of the study area and local cities in the area. According to the BEA, the per capita personal income for the Dallas-Fort Worth-Arlington (DFWA) metropolitan statistical area (MSA) in 2021 is $66,727. The per capita income for Collin County is $77,006 in 2021. The median household income for Collin County was reported in 2023 as $104,327 according to the U.S. Census Bureau's ACS 2022 5-year estimates. This is comparable to the median household income reported for the City of McKinney and slightly higher than for the study area.

The 2021 gross domestic product (GDP) reported by the BEA for Collin County is 71,341,415. The 2021 GDP reported by the BEA is higher for the DFWA MSA at 513,979,216. The BLS reports the Consumer Price Index (CPI) for DFWA for May 2023 as 287.133 for all items, which was a 4.7 percent change from the previous year. The CPI measures the average change over time in the prices paid by urban consumers in the United States for a market basket of goods and services.

In April 2023, the BLS reports 644,936 in the labor force for Collin County. The labor force consists of both the employed population (624,215) and the unemployed population (20,721). Similarly, for the Dallas-Fort Worth-Arlington (DFWA) metropolitan statistical area (MSA) the labor force is reported to be 4,383,100 in March 2023 consisting of 4,233,300 employed and 149,800 unemployed. For Collin County, there were over 28,000 employer establishments in 2021.

Existing Airport Economic Impacts

A recent study reviewed current sales and economic impact of TKI along with other airports in the area. According to the 2011 Economic Impact Study by the University of North Texas for the Texas Department of Transportation, the airport generates $44,248,730 in economic activity with $17,709,560 in salary, wages and benefits and provides for 378 jobs. From 2003 to 2014, the Airport generated more than $26,962,772 in combined revenue from ad valorem taxes to the City of McKinney, McKinney ISD, Collin County and Collin College. For comparison purposes, the same technical report shows statewide general aviation generating over $480 million in economic activity with over $167 million in salary, wages, and benefits, and employs over 56 thousand permanent jobs.

In 2018, TxDOT Aviation Division studied the economic impacts of general aviation airports in Texas. For TKI, a total of 993 jobs, over $64 million in payroll and over $212 million in output was reported. Payroll measured the total annual salary, wages and benefits paid to all workers whose livelihoods are directly attributed to the airport activity. Output measured the number of goods and services related to the airport. The output of on-airport businesses is typically assumed to be the sum of annual gross sales and average annual capital expenditures.

Existing Community Conditions, Housing and Populations
An area database search was performed using the North Central Texas Council of Government (NCTCOG) data to identify presence of public services and facilities available in the study area. Online database searches also identified additional sites included and shown in the referenced map. Several public service facilities such as police and fire were identified along with community parks and recreational centers. Sites within the 5-mile study area are shown in the Land Use and Community Facilities Map included in **Appendix A**.

A general site visit and windshield surveys were performed in the spring of 2023 (March and June 2023) to make field observations of the area surrounding the airport. Residential areas are located to the east and west of the airport property. Residential housing to the east of the airport consists mostly of large parcel, single family housing with a more rural character. To the west of the airport, residential housing is more densely populated, single-family housing with a more urban character. Increasing commercial development was observed adjacent to the airport, but mostly undeveloped open fields are observed with intermittent commercial development in the general vicinity adjacent to the airport. Single family residences and multi-family housing were observed approximately one mile to the west of the airport near the State Highway 5 corridor.

Environmental Justice
Environmental Justice populations are considered minority populations and/or low-income populations. Minority populations are defined as previously stated according to DOT Order 5610.2 and CEQs definition of a minority population. According to the United States Census Bureau (USCB) 2020 Census, the study area, consisting of 3,367 census blocks, has a minority population of 45 percent of the total population. The EJ Populations Map included in **Appendix A** show the census geographies used to review the demographics in the study area including the minority population census blocks (areas with a minority population that exceeds 50 percent of the total population within the census block). While there are 1,286 census blocks with less than 50 percent minority, there are 1,044 census blocks with more than half of the population that identify as minority. Comparing the various geographic areas as listed in **Table 10**, the 5-mile study area surrounding the airport is similar to the demographics for the City of McKinney. The City of Allen is closest in size to the City of McKinney and also has similar demographics as the study area.

The study area encompasses an area consisting of 99 census block groups. Within these block groups, approximately six percent of the 62,884 total households have a household income below the poverty line. The percentage of persons living below the Department of Health and Human Services 2023 poverty guidelines is approximately 6 percent. At the block group level, there is one census block group with a median household income below the 2023 DHHS poverty guideline of $30,000. It is reported to have a median household income of $22,519 and 18 percent of households below the poverty guideline. There are other census block groups with a poverty percent of households above 18 percent, but all others have median household incomes greater than the poverty threshold. It also shows the percentage of households at the census block group level that are below the poverty level (“low income”).

Table 10: Study Area Demographics

Geographic Area	Total Population	Minority Population	Number of Households	Median Household Income	Percent Poverty Level	LEP Population
Collin County	1,064,465	49%	369,168	$104,327	6%	10%
Allen	104,627	49%	33,786	$118,254	4%	9%
Fairview	10,372	27%	4,138	$92,326	12%	1%
Lowry Crossing	1,689	25%	648	$99,118	6%	7%
Lucas	7,612	24%	2,412	$159,563	2%	3%
McKinney	195,308	47%	65,770	$106,437	6%	7%
Melissa	13,901	36%	4,164	$127,391	6%	5%
New Hope	661	23%	356	$73,542	8%	11%
Princeton	17,027	55%	5,331	$85,548	6%	4%
Study Area	191,810	45%	62,884	$96,250	6%	7%

Source: 2020 Census and 2021 American Community Survey, U.S. Census Bureau.

4.10.2 Environmental Consequences and Mitigation

No Action Alternative
Under the No Action Alternative, no construction would occur, and no community or economic impacts are anticipated.

Proposed Action Alternative
Adverse socioeconomic impacts associated with airport improvements typically involve relocation or other community disruptions, including changes to transportation patterns that could divide existing communities. Airport activities that interfere with orderly planned development, or that change levels of employment appreciably may also impact communities. Such impacts are usually evaluated based on the area of impact. Per FAA Order 1050.1F, an impact is considered significant if the project negatively affects a disproportionately high number of minority or low-income populations or if children would be exposed to a disproportionate number of health and safety risks. The Proposed Action would remain all within the existing land use and airport boundary owned by the City of McKinney. For the Proposed Action, the land east of the existing runway is owned by the City of McKinney and would be allocated for airport use. No new property is being acquired and no relocation or displacement of any houses or businesses would be required. As presented in **Section 4.7**, the noise analysis conducted for this EA indicate that for the described alternatives, the 65 dB noise contour projected in 2026 would remain entirely on the airport grounds and any noise level increases over incompatible land uses are not significant. In 2031, the Proposed Action would extend just south of airport property as shown in the Noise Contour Map included in **Appendix A**; however, a separate roadway project (Spur 399) conducted by the TxDOT plan to acquire right-of-way at this location and would result in compatible land use for transportation purposes. Continued coordination with TxDOT showed similar schedule of acquisitions to occur simultaneous to the opening year for the Proposed Action. Therefore, the No Action and the proposed action are not expected to produce significant adverse impacts to the surrounding community.

The proposed action is not anticipated to adversely affect the community cohesion of any neighborhood or subdivision. Distinct and established neighborhoods are generally located to the west of the airport whereas the areas to the east of the airport are largely undeveloped with some large homestead lots. The City of McKinney Comprehensive Plan also looks out to 2040 for land use and is consistent with current conditions, where the established neighborhood district is the to the east, the airport is located within the business and aviation district and the homestead district is delineated to the southeast of the airport area.

Emergency services would be required, and accommodations would be needed to cover the airport and its additional employees and travelers. However, airport security and staffing specifically to service the airport would reduce the potential strain on local resources for these services and would not make a substantial adverse effect on the local community.
According to Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks* (USEPA 1997), federal agencies must identify and assess environmental health and safety risks that may disproportionately affect children. These risks include those that are attributable to products or substances that a child is likely to come in contact with or ingest, such as air, food, drinking water, recreational waters, soil, or products to which they may be exposed. The No Action and Proposed Action are not expected to increase safety risks that may disproportionately affect children. Improvements would not result in effects to products or substances that would affect children disproportionately.

The existing conditions reported in 2018 by TxDOT Aviation Division are anticipated to be unaffected by the proposed commercial services to be added from the proposed action. The no action would likely also not have any adverse impacts to these conditions. An Economic Impact Study Analysis was conducted in 2022 for the Proposed Action. The study determined potential economic impact of the Airport's annual operations as it adds commercial services. The estimated economic impacts included projected number of jobs, labor income, GDP and output. The estimated direct on-airport jobs at TKI are projected to be approximately 1,040 in the opening year and approximately 1,420 jobs in 2040. Projected output in opening year is $433 million and $592 million in 2040. These additional commercial services would provide additional jobs in addition to the existing jobs in place for the general aviation services and provide additional output and economic growth to the area.

Indirect Impacts

The proposed action has the potential to result in additional growth to the area, but it is projected that the new commercial services would mostly divert passengers from other local airports to TKI to meet and accommodate projected growth regardless of the proposed action. Diversion of passenger traffic to TKI is anticipated but is not projected to substantially impact the capacity to the local roadway network and would not require additional capacity improvements. The additional jobs anticipated from the proposed action for the terminal operations and associated services at the airport may provide economic benefits to nearby communities and to the region as additional workers would commute to the airport for employment. Indirect job opportunities would occur potentially from commercial services to the airport and indirect hospitality and related industries would also benefit. There is a potential for development and additional growth on surrounding vacant land; however, the growth trends in the area are anticipated regardless of passenger commercial services and the proposed action. Overall, the

proposed action would not substantially alter the existing growth trends in McKinney or the region. Growth is anticipated regardless and independent of the proposed action.

4.11 Visual Effects

Visual and lighting impacts relate to the presence of sensitive visual receptors in proximity to the airport. FAA Order 1050.1F states that although the threshold of significance for light emissions and visual resources/visual character has not been established by the FAA, the sight of aircraft, aircraft contrails, or aircraft or airport lighting from a distance is not normally intrusive and is not considered an adverse impact. However, the characteristics of many runway lighting systems create potential sources of annoyance to nearby residents in the airport vicinity if light is directed towards light-sensitive land uses. Impacts might occur when a high intensity strobe light, such as a runway end identifier lighting (REIL), produces a glare on any adjoining site, particularly residences.

4.11.1 Affected Environment

There are currently several lighting features at TKI that are associated with airside operations. The following features at TKI include lit signage, emergency lighting system and generators, taxiway and runway lighting, and approach lighting systems. These lighting features are to assist in identification of pavement edges and used in safe operations of airside activities.

- An Approach Lighting System (ALS) is a configuration of lights positioned symmetrically along the extended runway centerline to supplement navigational aids, such as an instrument landing system (ILS), to provide lower visibility minimums. TKI has a Medium Intensity ALS with Runway Alignment (MALSR), which is a federal Navigational Aid (NAVAID), that extends approximately 2,500 feet north from the Runway 18 threshold and a Medium Intensity ALS (MALS) that extends approximately 1,500 feet south from the Runway 36 threshold.
- Pavement edge lighting defines the lateral limits of the pavement to ensure safe operations during night and/or times of low visibility, which maintains safe and efficient access to and from the runway and aircraft parking areas. Runway 18-36 is equipped with High Intensity Runway Lighting (HIRL) and threshold lights.
- A four-box precision approach path indicator (PAPI-4L) is available on the left side of both runway end approaches. A PAPI system has a range seen from the air of five miles during the day and up to 20 miles at night. Each PAPI at TKI provides a standard 3.00-degree glide path.
- TKI has medium intensity taxiway lighting (MITL) that is elevated on mounted units to each side of the taxiways.
- Airfield lighted signs located at each taxiway intersection assist pilots in identifying runways, taxiway routes, holding positions, and critical areas.

4.11.2 Environmental Consequences and Mitigation

No Action Alternative
Under the No Action Alternative, no changes to viewsheds and no visual impacts would occur.

Proposed Action Alternative
Limited security and building lights are present throughout TKI. Lighting improvements will be required for the Proposed Action including roadway and parking lighting and additional

operational lighting required for commercial services. The airport is surrounded by a mixture of land uses as discussed herein. Visual impacts are not anticipated to affect residences or adjacent properties from these improvements. The distance to nearby residences would be sufficient to provide a buffer from light effects from the terminal building, parking, and other associated constructed elements. Angles of lighting would be determined, and considerations made to reduce and minimize potential impacts to adjacent properties. Lighting improvements required for the Proposed Action may result in impacts to wildlife, including disruptions to day/night patterns and reproductive cycles, as well as impacts resulting from the attraction or avoidance of organisms to the site. Light pollution impacts to biological resources are further discussed in **Section 4.2**.

Visual changes would result from the facilities and roadways that would be constructed as part of the Proposed Action. The viewshed from FM 546 would be altered with the replacement of existing open field and forested areas to building facilities and paved surfaces. The vertical views would be altered, but not substantially in context of the generally flat terrain. Furthermore, the views of the terminal building would not substantially encroach on the skyline because it would be limited to a two to three level facility and would be set back approximately a quarter mile from FM 546. The Proposed Action would not impact the viewshed of adjacent properties because there is only one commercial development that is along FM 546 across from the study area. This development is a warehouse/distribution type facility and would not be adversely affected nor would the proposed action visually impact this facility nor their ability to do business.

4.12 Water

There are four primary water resources addressed in this section: wetlands, surface waters, floodplains, groundwater, and Wild and Scenic Rivers. Federal and state statutes regulating these water resources were reviewed to analyze potential impacts for the Proposed Action; these are identified below.

- EO 11990 – Degradation of wetlands
- U.S. Department of Transportation (DOT) Order 5660.1A – DOT instructions on EO11990
- Clean Water Act (CWA)
- U.S. Army Corps of Engineers (USACE) – Section 404 of the CWA
- Texas Commission on Environmental Quality (TCEQ) – NPDES Permitting
- EO 11988 – Floodplain management
- Rivers and Harbors Act of 1899

These statutes prevent/minimize the loss of wetlands, control discharges and pollution sources, establish water quality standards, protect drinking water systems, and protect aquifers and other sensitive ecological areas.

4.12.1 Affected Environment

The study area for water resources is considered the direct study area as shown in **Appendix A: Study Area Map.** A larger study area was retained for evaluating indirect effects to water quality downstream of airport property and includes the tributaries with connections to East Fork Trinity River one mile from the project. Initial coordination letters were submitted to the USACE, TCEQ, and Federal Emergency Management Agency (FEMA), as the governing agencies of

respective resources. Refer to **Section 8.0** regarding agency coordination. Additional coordination with these agencies has occurred and can also be found in **Appendix D**.

Wetlands
A wetland and stream delineation of the project area was conducted on April 14th, 2022, by the project team. Survey methods followed USACE Fort Worth District guidance and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (v2.0) for evaluating jurisdictional wetlands. There are no wetlands present within the study area, therefore no further analysis is necessary.

Surface Waters
The study area is located directly east of the TKI runways and within the East Fork Trinity River – Lavon Lake watershed of the Trinity River basin. The southeastern end of the APE contains six streams, all unnamed tributaries to East Fork Trinity River. East Fork Trinity River has been designated as an impaired 303(d) stream for bacteria and is located approximately one mile east of the Proposed Action. At the time of this assessment, TCEQ has not established a Total Maximum Daily Load (TMDL) for this segment.

All streams in the study area are depicted in **Table 11** and the **Water Resources Map**, located in **Appendix A**. In total, approximately 1,121 linear feet (LF) of intermittent stream and 1,537 LF of ephemeral stream occur within the study area. No perennial streams occur within the study area. The unnamed tributaries represent one single and complete crossing and are potentially jurisdictional streams based on their connection to a relatively permanent water (East Fork Trinity River) with downstream connections to a traditional navigable water (Trinity River).

Table 11: Water Features in Study Area

Name	Stream Type	Ordinary High-Water Mark Width	LF within Study Area
Stream 1	Intermittent stream	4’	1,121
Stream 2	Ephemeral stream	1’	38
Stream 3	Ephemeral stream	1’	38
Stream 4	Ephemeral stream	2’	650
Stream 5	Ephemeral stream	1’	81
Stream 6	Ephemeral stream	1’	730

Source: Project Team, 2022.

The airport has proactive stormwater management practices implemented to reduce the amount of pollution that enters the East Fork of the Trinity River. The airport accomplishes pollution prevention through the implementation of a site-specific SPCC, industrial SWPPP, and individual NPDES permit.

Floodplains
Floodplains are lowland and relatively flat areas next to bodies of water that are subject to one percent or greater change of flooding in any given year. Floodplain ecosystem services include providing groundwater recharge, improved water quality, plant and wildlife habitat, aesthetic

value, outdoor recreation, agriculture, and forestry. The limits of base floodplains are determined by the Federal Emergency Management Agency (FEMA) and mapped on Flood Insurance Rate Maps (FIRMs).

The APE is located within FIRM panel 48085C0290J (updated as of June 2nd, 2009). There are no regulatory floodplains or floodways intersecting the APE. The nearest floodplain is located approximately 550 feet north of the northeast corner of the APE and is associated with the East Fork Trinity River, which runs parallel to the east of the APE.

Groundwater
The Texas Water Development Board (TWDB) has established 16 Groundwater Management Areas (GMAs) across Texas to protect and conserve groundwater reservoirs and subdivisions and to prevent subsidence due to groundwater extraction. The study area is located inside the boundaries of GMA 8 and above the confined Woodbine Aquifer, a minor aquifer overlaying the Trinity Aquifer which provides water for municipal, industrial, domestic, livestock, and small irrigation supplies (Nordstrom 1982). Recharge to the Woodbine aquifer is supplied by the percolation of rainfall and/or seepage from streams in the outcrop area, west of Collin County and outside of the project area (Nordstrom, 1982). Groundwater flow direction has not been reported in the vicinity of the subject property. The study area is not located within a karst region.

Wild and Scenic Rivers
The National Wild and Scenic Rivers System (NWSRS) was created by Congress in 1968 to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The study area does not contain and is not nearby a Wild and Scenic River.

4.12.2 Environmental Consequences and Mitigation

No Action Alternative
No impacts to wetlands, surface waters, downstream floodplains, or groundwater will occur as a result of the No Action Alternative. Indirect impacts typical of pollution runoff from the adjacent roadway will not increase.

Proposed Action

Direct Impacts
Wetlands
Direct impacts to wetlands are not anticipated as no wetlands were identified during the site visit.

Surface Waters
The Proposed Action will require the filling, re-routing, and encapsulation of 248 linear feet of three ephemeral streams and one intermittent stream in order to construct roads that would connect FM 546 to all facilities associated with the expansion. Three new 30-inch culverts are proposed to convey stream and stormwater flow beneath these roads. These impacts have been minimized to the extent practicable. No physical alternation of any identified streams will occur. No other long-term impacts to surface waters are anticipated under the Proposed Action.

The appropriate Section 401 water quality certification shall be obtained in conjunction with the required Section 404 permit. As all delineated streams will be culverted or pipelined beneath roadways as part of the airport improvements and stream modifications will not impact over 300 ft or 1/10 of an acre, waters of the United States within the project area will be covered by a non-reporting Nationwide Permit 14.

Potential impacts to water quality resulting from long-term operations under the Proposed Action were assessed. The improvements include the implementation of several acres of impervious cover, which will alter the existing stormwater drainage basins in the study area. As part of the Proposed Action, stormwater improvements will be made throughout the site to manage drainage within the basins affected by development. The roadways and parking lots will use stormwater inlets to capture pavement runoff. Stormwater pipes will convey the runoff to different detention ponds located on the site. The detention ponds will reduce peak rate of runoff, ensuring that the post-construction discharge will be less than or equal to the pre-existing conditions, thereby avoiding adverse impacts to stream morphology in the study area due to excess runoff.

Potential impacts to water quality resulting from stormwater runoff during construction were also assessed. Temporary, short-term impacts to surface waters within the disturbed areas may occur from stormwater runoff during construction. These impacts, which may occur as a result of increased sedimentation and siltation resulting from land disturbance or petrochemical spills, may temporarily decrease water quality. However, these impacts are not anticipated to be significant as BMP measures and provisions and specifications of FAA AC 150/5370-10F *Standards for Specifying Construction of Airports* will be implemented to avoid and/or minimize adverse construction activities.

However, without proper treatment infrastructure, stormwater detention will not entirely reduce water quality impacts associated with long-term operations. With increased activity at the airport, non-point source pollution is anticipated to increase. Common pollutants from operations include trash/debris, heavy metals, hydrocarbons, and bacteria. As operations are to include regular lawn maintenance and landscaping surrounding these facilities, there is also the potential for excess nutrients, fertilizers, and/or suspended solids entering stormwater. As mentioned in the previous section, the airport has proactive stormwater management practices implemented to reduce the amount of pollution that enters the East Fork of the Trinity River. The airport accomplishes pollution prevention through the implementation of a site-specific SPCC, industrial SWPPP, and individual NPDES permit.

Since construction activity will disturb more than one acre of soil (240 acres), a TPDES Construction General Permit (CGP) from TCEQ will be obtained for stormwater runoff resulting from construction activities. Additionally, the existing TPDES permit that regulates the quantity and quality of stormwater discharged at the airport will need to be revised. The Proposed Action will slightly alter the airport's drainage conveyance by grading and the addition of impervious cover. The airport's TPDES permit will be updated as needed to reflect these changes and the airport will continue to comply with TPDES stormwater requirements and all federal, state, and local water quality requirements. No other construction-related impacts to surface waters are anticipated as a result of the Proposed Action.

Floodplains
Direct impacts to floodplains are not anticipated as construction will not occur within any regulatory floodplains or floodways.

Groundwater
The Proposed Action is not anticipated to directly impact any public drinking water supplies, public wells, or groundwater resources as the project is located far outside of an aquifer recharge zone. Therefore, loss of infiltration due to the impervious cover associated with the Proposed Action will not affect groundwater recharge. Furthermore, polluted runoff and petrochemical spills from impervious surfaces will not contaminate the aquifer.

Indirect Impacts
Wetlands
Indirect impacts to wetlands are not anticipated as no wetlands were identified during the site visit.

Surface Waters
Temporary indirect impacts could affect downstream relatively permanent waters (RPWs) if sediment-laden water resulting from erosion during grading activities traveled off-site during construction. However, these impacts would be short-term and are anticipated to be minimal due to BMPs implemented during land disturbance.

Impacts to water quality downstream resulting from long-term operations under the Proposed Action may occur. Increased stormwater runoff resulting from the addition of impervious cover may indirectly increase the volume and/or decrease the quality of water entering downstream RPWs. However, dilution and the use of proper BMPs will help prevent indirect and cumulative impacts to downstream systems. The Proposed Action will not introduce any bio accumulative materials into stream systems that would harm aquatic organisms. Modifying the airport's existing Multi-Sector General SWPPP will be essential to maintaining TCEQ water quality standards following the airport expansion.

Floodplains
Indirect impacts to floodplains are not anticipated as construction will not occur within any regulatory floodplains or floodways.

Groundwater
Indirect impacts to groundwater are not anticipated as the Proposed Action is not located near a groundwater recharge zone or karst region.

Mitigation and BMPs
Surface Waters
The Proposed Action will be subject to regulatory programs such as Sections 401 and 404 of the CWA (administered by TCEQ and USACE), which protect surface waters by requiring proposed improvements to meet water quality standards.

Operational BMP measures and provisions and specifications of FAA AC 150/5370-10F *Standards for Specifying Construction of Airports* will be implemented to avoid and/or minimize adverse construction activities. Additionally, as required by the CWA Section 402 NPDES

permitting process, a SWPPP for construction activities will be developed and implemented. General construction BMPs (including silt fences, check dams, and other controls as appropriate) will be incorporated into construction plans to help prevent erosion, protect water quality, and ultimately to minimize potential impacts to surface water resulting from storm water runoff. In addition, BMPs will require measures to prevent or minimize the potential release of contaminants into surface waters, provide swift response to accidental spills, and define acceptable on-site storage of fuel and lubricants. Following construction, the airport's SWPPP will be revised to account for new pollution sources resulting from the expansion.

5.0 Cumulative Impacts

The CEQ regulations define a cumulative impact as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions" (40 Code of Federal Regulations [CFR] § 1508.7).

The cumulative impacts analysis evaluates resources determined to have substantial direct or indirect impacts resulting from the proposed project. According to DOT guidance, if the proposed action does not affect a specific resource, the proposed action does not contribute to the cumulative effects of that resource. Based on the analyses and studies performed on the Proposed Action, the following resources and categories of study were not substantially affected directly or indirectly by the proposed action, do not have any cumulative effects resulting from the Proposed Action, and would not warrant additional cumulative impact analyses on the following resources and evaluated topics: Section 4(f)/6(f), wetlands, streams, cultural, threatened or endangered species, community and EJ populations. Other resources and topics studied and determined to result in effects from the Proposed Action are air emissions, farmlands and vegetation, and visual impacts.

The proposed action resulted in additional air emissions from adding new commercial services to the Airport. Effects to air quality and emissions are mitigated and would be monitored. These effects, including indirect and cumulative effects, is previously discussed in **Section 4.0**. In summary, the general conformity determination demonstrated and detailed that excess emissions reductions exist within the applicable Texas SIP that could be used to account for ozone precursor emissions generated by the Proposed Action. All future and reasonably foreseeable actions that contribute to possible cumulative impacts would be required to be studied and coordinated with the TCEQ.

Past and present urban development continue to impact farmlands and vegetation. The overall impact of these resources from the accumulation of these actions are reduced areas for prime farmland and reduced vegetation for possible wildlife habitat. The transition to more urbanized developments continues as population and economic growth increases in the area. Efforts through local ordinances, development agreements, and management plans by the City would assist developers in setting aside possible green spaces for native vegetation to counterbalance vegetation and farmland reductions from urbanized development.

Visual changes would also result from the proposed action; however, these changes would not adversely affect any residences or sensitive resources. Other visual changes in the area from past commercial developments and anticipated future developments and construction adjacent to the airport and on surrounding parcels would change the landscape from the undeveloped,

more rural look and feel to a more urbanized look and feel. Reasonably foreseeable actions that were identified include proposed roadway improvement projects by TxDOT for Spur 399 and FM 546. These changes cumulatively would result in obstructed views dominated by urban development buildings and structures. Coordination by the City and TxDOT would be needed to ensure that these projects would be consistent with the overall zoning and planning requirements by the City and County.

6.0 Agency Coordination

Coordination letters were sent to applicable local, state, and federal agencies to solicit input regarding potential environmental and cultural resources which could be impacted by the Proposed Action. The following agencies were consulted during the preparation of this EA and associated studies:

- Environmental Protection Agency (EPA)
- Federal Emergency Management Agency (FEMA)
- Natural Resources Conservation Service (NRCS)
- Texas Historical Commission (THC)
- State Historic Preservation Office (SHPO)
- Texas Parks and Wildlife Department (TPWD)
- Texas Commission of Environmental Quality (TCEQ)
- United States Army Corps of Engineers (USACE)
- United States Fish and Wildlife Service (USFWS)

Correspondence, responses, and comments that were received are included in **Appendix D**. Correspondence in association with the TCEQ are included in **Appendix C** as part of the general conformity documentation.

7.0 Public Involvement

Several public involvement events were held to provide the public an opportunity to view project materials and information. Two community meetings in 2023 and one public meeting in 2025 were held in association of the proposed project.

The two community meetings were held on March 23, 2023, and April 19, 2023, at the Old Settlers Recreational Center (1201 E Louisiana Street, McKinney, Texas). Both meetings were held in an open house format and allowed the public to come and go at their convenience between the hours of 6pm and 8pm. A short presentation and exhibit boards were presented to provide information about the project and environmental resources studied.

In association with the notice of availability for the draft EA, a public meeting was held on January 16, 2025, at the Fitzhugh Conference Room at the City of McKinney City Hall (401 E. Virginia Street, McKinney, Texas). The Draft EA was prepared and made available for public review and comment starting from December 22, 2024, through January 31, 2025. The notice of availability to view and comment on the Draft EA was posted on the TKI website (www.flytki.com) and published in the McKinney Courier-Gazette, a newspaper of general circulation in McKinney, Texas. A copy of the advertisement and affidavit of publication is included in **Appendix K**. The draft EA was made available for the public to review for over 30 days. The draft EA was posted on the TKI website (www.flytki.com) and copies were available

for public viewing at the airport (1508 Industrial Blvd., McKinney, TX 75069) and the Ray and Helen Hall Memorial Library (101 E. Hunt St., McKinney, TX 75069). The open house format public meeting was held to provide an in-person option for the public to attend, ask questions, review project materials, and submit comments. Attendees included 29 public residents, 3 elected officials, 2 public officials, 1 media representative, and 5 project team staff. Opportunities for the public to provide comments was available through regular mail, email, voicemail, and online. A total of 230 comments were received from December 22, 2024, through January 31, 2025. The comment and associated responses are included in **Appendix K**.

8.0 Environmental Permits, Commitments and Mitigation

- The Airport will comply with all federal, state, and local development regulations, Executive Orders and permitting requirements. Prior to initiating construction activities associated with the Proposed Action, TKI will obtain permit coverage under the Texas Construction General Permit (TXR150000) for Storm Water Discharges from Construction Activities. As required by the Permit, a site-specific SWPPP will be developed and implemented for the Proposed Action.
- If cultural materials are encountered during construction or disturbance activities, work should cease in the immediate area; work can continue where no cultural materials are present. Contact the THC's Archeology Division to consult on further actions that may be necessary to protect the cultural remains.
- A National Pollutant Discharge Elimination System (NPDES) construction stormwater discharge permit will be obtained prior to construction.
- In accordance with OSHA Regulation 29 CFR 1926.62(d)(1), it will be the responsibility of the contractor to develop and communicate controls to be implemented to reduce employee lead dust exposure for said company and personnel.
- A U.S. Army Corps of Engineers Section 404 Permit will be obtained under a non-reporting Nationwide Permit 14 – Linear Transportation Projects for permanent impacts to streams in the study area.
- The airport's existing industrial SWPPP and SPCC will be updated to ensure compliance with local, state, and Federal regulations and to reflect potential changes in runoff due to the Proposed Action. Existing discharge permits will be modified as needed to ensure compliance with local, state, and Federal regulations.
- Any unanticipated hazardous materials encountered during construction would be handled according to applicable federal, state, and local regulations, the airport and/or the contractor would be notified, and steps would be taken to protect personnel and the environment.
- Best Management Practices for stormwater pollution prevention will be employed throughout the duration of disturbance activities.
- The potential impacts of fugitive dust and combustion emissions will be minimized using control measures contained in standard specifications, as appropriate.
- City of McKinney Tree Ordinance, Section 146-136 - Landscape and Tree Preservation requires a permit and mitigation to remove protected trees within the city limits of McKinney. However, since the airport is a part of the City, a tree survey and tree preservation plan (mitigation) are not required. A tree removal application would be required.
- Precautions will be taken to avoid impacts to SGCN and natural plant communities during construction, operation, and maintenance. As recommended by TPWD, employees and contractors will be informed of potential SGCN in the project area.

Wildlife observed during construction, operation, and maintenance will be allowed to safely leave the site.

- Site design would minimize the removal of vegetation and native habitats to the extent practicable.
- Construction equipment will be properly cleaned to prevent the import and export of plant materials and seeds, and invasive plants, if discovered, will not be mowed through during land clearing. During revegetation, native plants and seed mixes will be utilized if reseeding is applied.
- As protection measures for birds and other wildlife, the amount of night-time lighting needed for safety and security at the site will be minimized to the extent practicable, focusing light downward when possible, dark-sky friendly lighting that is illuminated only when needed, down-shielded, as bright as needed, and minimizing blue light emissions.
- Construction activities will avoid removal and destruction of active bird nests except through federal or state approved options. As recommended by TPWD, a nest survey will be performed, between March 15 to September 15, occurring one week prior to construction to ensure that no nests with eggs or young will be impacted by construction. Any active nests encountered would result in further coordination with a local or regional USFWS office.

9.0 Conclusion

Based on the studies and findings presented in this EA, the Proposed Action would not result in a significant impact on the human or natural environment. Therefore, a finding of no significant impact is recommended.

10.0 List of Preparers

The individuals listed in the table below assisted in the preparation of this EA.

Personnel	Organization	Role
Michele Lopez	Garver	Environmental Lead
Leigh Mercer	Garver	Scientist
Tracy Michel	Garver	Scientist
Susan Chavez	Garver	Reviewer
Ryan Mountain	Garver	Reviewer
Deborah Dobson-Brown	Amaterra	Lead Historian
Kurt Korfmacher	Amaterra	Historian
Sunshine Thomas	Amaterra	Archeologist
Robert Mentzer	Harris Miller Miller & Hanson Inc.	Noise Specialist
Philip DeVita	Harris Miller Miller & Hanson Inc.	Air and Climate Specialist

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