U.S. Department
of Transportation
**Federal Aviation
Administration**

Department of Transportation

Federal Aviation Administration
Orlando Airports District Office
Orlando, Florida

FINDING OF NO SIGNIFICANT IMPACT
AND
RECORD OF DECISION

Environmental Assessment for
New Airside D Passenger Terminal
at
Tampa International Airport

Tampa, Florida

May 8, 2024

BACKGROUND: The Tampa International Airport (TPA) is a commercial service airport owned and operated by the Hillsborough County Aviation Authority (Authority or Airport Sponsor) and the airport supports a range of aviation services and activities. The airport is located approximately 5 miles northwest of downtown Tampa, in Hillsborough County. TPA hosts commercial air service and cargo operations and has multiple fixed-based operators (FBO) and maintenance, repair, and overhaul (MRO) facilities.

The Authority proposes to design and construct a new Airside D passenger terminal (Airside D) to support additional commercial service at the airport, referred to as the Proposed Action. The Proposed Action is subject to review under the *National Environmental Policy Act of 1969* (NEPA). Accordingly, an Environmental Assessment (EA) was prepared by the Airport Sponsor for the FAA's use in complying with the requirements of NEPA, Council on Environmental Quality (CEQ) regulations implementing NEPA, FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, and FAA Order 5050.4B, *NEPA Implementing Instructions for Airport Actions*.

This Finding of No Significant Impact (FONSI) and Record of Decision (ROD) provides the FAA's environmental determination, approval, and conditions for agency actions necessary to implement the Proposed Action. This FONSI/ROD is based on information and analyses contained in the *Environmental Assessment for New Airside D*, which is incorporated by reference, and other related documents available to the Agency. The ROD is issued in accordance with CEQ regulations at 40 CFR §1505.2.

PROPOSED DEVELOPMENT PROJECT: The Airport Sponsor's Proposed Project is the construction and operation of a new 563,000-square-foot, three-level Airside D associated components. The Proposed Project will be constructed northwest of the main terminal in the same location as previous Airside D. Construction activities are anticipated to begin 2025.

The Proposed Project includes the following elements:

1. New 563,000- square-foot, three-level Airside D

    - Floor Level 1: accommodates the explosive detection system, baggage, building service functions, and airline support.
    - Floor Level 2: accommodates the Airside D automated people mover (APM) station, Transportation Security Administration (TSA) security screening checkpoint (SSCP), and passenger pre-boarding functions (hold rooms, restrooms, dining, shops, passenger boarding bridges).
    - Floor Level 3: accommodates the Airside D federal inspection services (FIS) and airline club(s).
    - The aircraft parking capabilities would be as follows:

        i. The maximum narrowbody-only configuration would yield 16 contact gates, with 8 narrowbody gates that provide capabilities for either two narrowbody aircraft or a single widebody aircraft.

        ii. Maximum widebody configuration would yield 12 contact gates, with 8 widebody and 4 narrowbody gates.

        iii. Maximum narrowbody/widebody mix configuration would yield 16 contact gates, with 4 widebody and 12 narrowbody gates.

    Narrowbody gates would accommodate aircraft as large as the Boeing 737-900 or Airbus A321, and widebody gates would accommodate aircraft as large as the Airbus A350-900.

2. Reconstruction of the apron.

3. Installation of a new hydrant fuel system.

4. Construction and operation of a 450-foot-long dual-guideway APM connected to the existing main terminal.

5. Airport personnel vehicle parking area with access gate connected to the existing Airport Access Road.

FAA PROPOSED ACTION: The Airport Sponsor's Proposed Project described above and in Section 1.2 of the EA represents the Airport Sponsor's intended development at the airport. FAA has determined that we have approval over the entire project.

REQUESTED FEDERAL ACTION: The requested Federal actions associated with the proposed development project include the following:

1. Unconditional approval of the Airport Layout Plan (ALP) to depict the proposed improvements pursuant to 49 USC § 40103(b) and 47107(a)(16).
2. Determinations under 49 USC § 47106 and 47107 relating to the eligibility of the Proposed Action for federal funding under the Airport Improvement Plan (AIP) and/or determinations under 49 USC § 40117, as implemented by 14 CFR 158.25, to impose and use passenger facility charges (PFCs) collected at the airport to assist in construction of potentially eligible development items on the ALP including the proposed construction of Airside D and associated actions.

PURPOSE AND NEED: Section 1.3 of the EA describes the purpose of and need for the Proposed Action, as identified by the Airport Sponsor.

The HCAA is proposing improvements at TPA that would meet projected passenger and airline (domestic and international) demand and proactively prevent near-future congestion. In 2022, scheduled departing seats represented 102.4% of January 2019 departing seats. The annual forecast prepared for the Master Plan Update (MPU) predicts the growth to continue. TPA currently has 57 narrowbody contact gates spread over four airsides (A, C, E, and F). Based on the annual forecast TPA would be deficient of 8 gates by 2028, 13 gates by 2032, and 19 gates by 2042. Additionally, the growth in international passenger rates requires a larger space for the Federal Inspection Services (FIS). The current FIS at Airside F can support 900 peak hour passengers but based on Customs and Border Protection guidelines, the facility should be expanded to accommodate 1,850 peak hour passengers.

ALTERNATIVES: Chapter 2 of the EA evaluated a range of reasonable alternatives to the Proposed Action, including the No-Action Alternative. The alternative evaluation criteria considered whether an alternative met the purpose and need and the alternatives' safety, economic, technical, and engineering factors.

Alternative 1: Use of Hardstands A and D

The use of hardstands would not require any additional construction as they would use the existing apron at Airside A and the former Airside D locations. Hardstands require passengers to board and deplane aircraft on the apron itself (no boarding bridges) and then be bussed to another Airside in order to access the main terminal. This would affect

airfield operations, passenger safety, passenger experience, and airline operational efficiency as passengers are exposed to the elements on the apron and bussing increases the time needed to transfer planes or transit to baggage claim. TPA does not have gate capacity or the required infrastructure at existing gates to support this option. This alternative would have Americans with Disabilities Act of 1990 (ADA) challenges as well since the transfer of passengers using walkers, wheelchairs, or motorized carts would require special lifts and would be complicated by meteorological conditions. The use of hardstands would also require an extensive network of portable or permanent apron-based auxiliary power and air conditioner units which would result in an increase in airside emissions and on-site noise levels. These units would also limit the aircraft taxi areas and service vehicle access and present additional safety hazards on the apron. For these reasons, Alternative 1 was eliminated from further consideration in the EA.

Alternative 2: Demolition of Existing Baggage Sorting Facility and Construction of a New Airside

This alternative includes demolishing the existing baggage sorting facility between Airsides A and C, relocation of Hardstand A, construction of a new 563,000 square-foot, 16-gate airside, and construction of a new baggage sorting facility. This would require approximately 30 acres, but the existing baggage sorting facility and Hardstand A occupy only 10 acres. To accommodate the facility in this area it would require closing/relocating taxiway connectors, Taxilane G and Taxiway C. Relocating Taxiway C would also require the relocation of Runway 19L/1R to the east. This would affect the entire infrastructure on the east side of the airport, along with aircraft operations on Runway 19L/1R. Currently the baggage sorting facility connects to Airsides E and F through a tunnel system and accepts baggage from Airsides A and C from ground support equipment. The baggage sorting facility then transfers the baggage to the Main Terminal claim areas. The loss of the baggage sorting facility would increase ground support equipment in the aircraft operating areas which would decrease safety and cause potential effects to aircraft ground operations. In addition, the relocation of the baggage facility to a new part of the terminal would be expensive. For these reasons, Alternative 2 was eliminated from further consideration in the EA.

Alternative 3: Construction and Operation of a New North Terminal

This alternative would be constructed in a mostly undeveloped area that contains a current employee parking area north of the existing Main Terminal. The improvements would consist of a 563,000 square-foot building, 16 gates, on-airport roads, passenger arrival and departure area, baggage claim, offices, airline check-in facilities, TSA, concessions, and restrooms. The employee parking area would need to be relocated as well. This alternative would require extensive construction that would not be completed in time to meet the airports capacity needs and it would create additional impacts from the relocation of the parking area and surface transportation improvements. Furthermore, the operation of two separate terminals would increase the Authority's annual operation and

maintenance costs. For these reasons, Alternative 3 was removed from further consideration in the EA.

No-Action Alternative

Under the No-Action Alternative, the Proposed Action would not be implemented. The Authority would continue to maintain and operate the airport in its present state and the environmental effects associated with the Proposed Action would not occur. Although the No-Action Alternative would not satisfy the purpose of and need for the Proposed Action, it was retained for further detailed evaluation in the EA in accordance with NEPA and CEQ regulations.

ENVIRONMENTAL IMPACTS: The No-Action Alternative and Proposed Action were evaluated for potential impacts on the environmental resource categories identified in FAA Order 1050.1F. The Affected Environment and Environmental Consequences sections of the EA (Chapter 3) provide a description of existing conditions and an analysis of direct, indirect, and cumulative impacts. Under the No-Action Alternative, the Proposed Action would not be implemented and the environmental impacts associated with the proposed facility and infrastructure improvements would not occur. The Proposed Action is to be constructed at the location of the previous Airside D. The area currently consists of pavement and a drainage swale. No wetlands or protected species are to be impacted. There are floodplains mapped within the area, but the current stormwater management system was capacity to handle the additional stormwater. The Proposed Action is expected to generate additional aircraft activity that would have an effect on the noise environment, but the impact is expected to be minimal. Although the main terminal and airsides have been determined to be a resource eligible for listing on the National Register of Historic Places (NRHP), the SHPO has concurred that the project will have no adverse effects to the resource.

If the Proposed Action was implemented, it would increase aircraft operations at TPA. When compared to the No-Action Alternative, the Proposed Action would generate an additional 462 aircraft operations at TPA in 2027 and 2,000 additional operations in 2032.

Air Quality – The airport is in an area designated by the EPA as in "attainment" with respect to all current National Ambient Air Quality Standards (NAAQS). Accordingly, the General Conformity Regulations do not apply to the Proposed Action. Furthermore, a detailed analysis and Conformity Determination were not required. Nevertheless, annual emissions inventories of construction and operational emissions associated with the Proposed Project were provided for disclosure purposes.

Operational emissions associated with the Proposed Action were computed for study years 2023 using FAA's Aviation Environmental Design Tool (AEDT). The emissions inventory in Table 3-3 of the EA compares the difference between emissions from the No-Action Alternative and Proposed Action against the emissions from Hillsborough County

as a whole. The additional aircraft operations associated with the Proposed Action would increase air emissions at TPA. However, the increase in emissions would be minor and represent a fractional amount of the total generated in Hillsborough County, which would not constitute a significant impact.

Table 3-2 discloses the construction period criteria pollutant emissions computed for the Proposed Action. All construction activities and associated pollutant emissions are expected to occur in 2025-2026. Because construction emissions are temporary in nature, it is not likely that the construction emissions will create a significant or lasting impact on air quality in the area. However, typical emissions reduction measures, in accordance with FAA AC 150/5370-10H, *Standards for Specifying Construction of Airports* will be employed.

The Proposed Action occurs in an area classified as Attainment for all criteria air pollutants, and there is no State Implementation Plan or numeric significance threshold applicable to the Proposed Action. No significant air quality impacts are anticipated.

Biological Resources (including Fish, Wildlife, and Plants) – The Proposed Action, an approximately 563,000 square-foot building, is being constructed on a previously modified area currently consisting of paved concrete and a maintained drainage swale that is categorized by the FDOT FLUCCS as (8100) Airport. No natural habitat nor wetlands occur within the study area, and none will be impacted because of the Proposed Action.

Federally Listed Species - As described in the EA, due to the lack of natural habitat to be impacted and documented occurrences, the Proposed Action would have "no effect" on the Audubon's crested caracara, Eastern black rail, Everglade snail kite, rufa red knot, American crocodile, Eastern indigo snake, hawksbill sea turtle, monarch butterfly, Florida golden aster, or pygmy fringe tree. The United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) Wood Stork Determination Key resulted in a "not applicable" determination; therefore, there will be No Effect to this species. Additionally, the project is not in a critical habitat area for any species.

State Listed Species – There is no natural habitat and no documented occurrences of listed species in the Proposed Action area. As such there are "no effects anticipated" for the gopher tortoise, short-tailed snake, pine snake, Florida sandhill crane, Florida burrowing owl, snowy plover, little blue heron, reddish egret, tricolored heron, American oystercatcher, roseate spoonbill, black skimmer, least tern, or listed plants.

The bald eagle is no longer listed under the Endangered Species Act but remains protected by the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act. The closest known eagle's nest is 3326.4 feet from the Direct Study Area. Management guidelines and protection measures apply to projects which occur within 660 feet of a nest location. Due to the highly disturbed nature of the Direct Study Area and the distance to the nest, the bald eagle should not be adversely affected.

Through an on-site assessment in 2023, available data, and the use of the USFWS *Effects Determination Key*, the FAA determined the Proposed Action would not have a significant impact on biological resources, including natural habitats, common species of wildlife, and protected species.

Climate – Temporary greenhouse gas (GHG) emissions associated with the construction of the Proposed Action are expected to be 4,612.09 metric tons of CO_2e in 2025 and 8,844.57 metric tons in 2026. The increased aircraft operations and vehicle trips associated with the Proposed Action would result in an increase in GHG emissions at the airport. The analysis projected an increase of 889.8 metric tons of CO_2e in 2027 and 3,856.67 metric tons in 2032, when compared to the No-Action Alternative.

Based on recent guidance from the Council on Environmental Quality (CEQ), the project was evaluated for the Social Coasts of Greenhouse Gases (SC-GHGs). This represents the monetary impact associated with catastrophic climate impacts with the increase of these gases. This resulted in a monetary impact of $78,000-$780,000 in 2025 and $150,000-$1,500,000 in 2026 during construction. Once in operation the analysis resulted in $16,000 - $157,000 in 2027 and $81,000 - $750,000 in 2032. The results represent a range of possibilities and are not guaranteed to occur. Advances in technology and operational practices could lead to lower social impacts than reported.

The FAA has not established significance thresholds for aviation GHG emissions, nor has the agency identified specific factors to consider in making a significance determination for GHG emissions. No significance thresholds have been set for SC-GHGs either. Consequently, there is currently no quantitative or qualitative basis for comparison of the GHG emissions or SC-GHG against any limits that would require project considerations or mitigation presented in the EA. Based on the analysis conducted for this EA, GHG emissions associated with the Proposed Action are not anticipated to have a significant effect on climate or climate change.

Coastal Resources – The entire State of Florida is located within a coastal zone. The closest USFWS Coastal Barrier Resource Unit (CBRS), Cockroach Bay (FL-83), is located approximately 18 miles south of the Direct Study Area. The closest Florida Department of Environmental Protection (FDEP) Office of Resilience and Coastal Protection management areas are Boca Ciega Bay, which is located approximately 20 miles to the southwest of the Direct Study Area, and Cockroach Bay, which is approximately 18 miles south of the Direct Study Area.

The Proposed Action would not affect coastal resources, create plans to direct future agency actions, or propose rulemaking that alters uses of a coastal zone that are inconsistent with the Coastal Management Program. As such, the Proposed Action would have no significant impact on these resources.

DOT Act, Section 4(f) Resources – There are no 4(f) resources within the Direct Study Area. The closest 4(f) resources are Rocky Point Golf Course, which is approximately 1

mile west of the Direct Study Area, Al Lopez Park, which is approximately 2 miles to the northeast, and Loretta Ingraham Park and Lincoln Garden Park are approximately 2 miles southeast. The Proposed Action would neither directly nor indirectly impact the use of these resources and all are outside the DNL 65 dB noise contours. One historically significant resource that could be eligible for protection under Section 4(f) is present in the EA study area, the Tampa International Airport (Site HI4544). The Proposed Action was evaluated for impacts to this resource and it was determined that there would be no adverse effect. This determination received concurrence from the SHPO on February 20, 2024. As the project is the re-establishment of an airport facility in line with the resources activities, attributes, and features, and it does not change the use of the resource, it does not constitute a "use" under 4(f) and there will be no 4(f) impact.

Farmlands – The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) does not show any soil types classified as prime farmland or farmland of statewide importance within the Direct Study Area. Additionally, the Direct Study area is not used to cultivate crops. The Proposed Action would not affect prime, unique, or state-significant farmland.

Hazardous Materials, Solid Waste, and Pollution Prevention – There are no known hazardous materials located in the Direct Study Area, per the EPA. One aboveground service equipment fuel tank is located within the Direct Study Area. The fuel tank has no hazardous conditions and would be relocated prior to construction. The former fueling system was taken out of service in 2007 and the lines were cleaned, grouted, and abandoned in place. Valve boxes and hydrant pits were removed except for two isolated valve boxes which remain at the edge of the apron. There is potential for residual underground petroleum products but the Proposed Action's design-builder would be charged with investigating the existing conditions during the design phase and constructing the project to meet all applicable environmental regulations and code requirements. Operation of the Proposed Action would increase the use of hazardous materials such as aviation fuel, oils, and solvents but the HCAA maintains a Spill Prevention and Countermeasure Control Plan (SPCC) and a Stormwater Pollution Prevention Plan (SWPPP) which should reduce the potential for hazardous material issues.

Because the Proposed Action does not include demolition of existing structures, it is expected that construction activities would generate minimal construction debris. Debris and wastes that could be generated during the construction would be recycled where possible, and whatever could not be recycled will be disposed at a permitted landfill. All materials would be disposed of in accordance with federal, state, and local rules and regulations.

The operation of the Proposed Action will result in additional solid waste. TPA has a diverse Sustainability Management Plan that includes recycling plastics, glass, aluminum, steel cans, newspapers, magazines, and paperboard. TPA achieved a diversion rate of

23% in 2021 and has a target of 30% by 2030. Additionally, a large portion of the municipal waste is sent to McKay Bay Waste-to-Energy facility where it is converted into electricity for the City of Tampa. The remaining waste is sent to the landfill.

The Proposed Action would not generate a considerable amount of hazardous materials or solid waste. Much of the construction waste to be generated could be recycled or diverted to permitted landfills. The Proposed Action would not enable new activity types and would not result in new types of solid waste or hazardous materials at TPA. Based on the analysis in the EA, the Sponsor's implementation of a Sustainability Management Plan, SPCC, and SWPPP, no significant impacts related to hazardous materials, solid wastes, and pollution are anticipated.

Historical, Architectural, Archeological and Cultural Resources – There are no resources listed on the National Register of Historic Places (NRHP) within the Area of Potential Effect (APE). The closest NRHP listed resource is the George Guida Sr. House located approximately 3.5 miles southeast of the APE. Although not officially listed, in 2018 the Tampa International Airport (Site ID HI4544) was evaluated and determined to be eligible for listing on the NRHP. TPA was found to be eligible based on its architectural style, integrity, and significant technological and design innovations, which meets National Register Criterion C.

The Proposed Action was evaluated for its potential to adversely impact this resource. The Proposed Action will be consistent with an airport setting, as well as complement the architectural style and integrity and reestablish significant technological and design innovations for which was the basis of the resource's eligibility. The Proposed Action will not significantly increase noise levels or introduce audible elements that would be out of character for the resource. Additionally, the construction and operation of the proposed Action would not significantly increase air emissions or introduce atmospheric elements out of character for the resource. Therefore, the Proposed Action will not affect the resources eligibility for NRHP listing and a no adverse effect was determined.

The APE is extensively disturbed and there are no known archaeological resources present. Due to the previous modification and current use of the Proposed Action area, no archaeological investigation was warranted.

Pursuant to Section 106 of the *National Historic Preservation Act*, consultation was initiated with the SHPO and two Native American Indian Tribes, the Miccosukee Tribe of Indians of Florida and Muscogee (Creek) Nation. Based on the background research and the CRAS, the SHPO concurred with FAA's determination the proposed undertaking would have no adverse effect on historic properties on February 20, 2024.

On March 6, 2024, the Muscogee (Creek) Nation confirmed that the proposed undertaking falls within their areas of interest and concurred with the finding of "no adverse effect." However, due to the historic presence of Muscogee people in the project area, they requested that all work cease, and appropriate agencies and tribes be notified, in the event

of an inadvertent discovery of any cultural resource, human remains, or other items subject to the Native American Graves Protection and Repatriation Act. No reply was received from the Miccosukee Tribe of Indians of Florida.

Based on the research and consultation conducted, the Proposed Action would not have significant impacts on historic, architectural, archaeological, and cultural resources.

Land Use – The Proposed Action would occur entirely on airport property and the existing land use in the Direct Study Area is classified as an Airport Compatibility District. The Proposed Action is consistent with future plans and would not cause any incompatibilities or inconsistences with local land use plans or affect other resources that could indirectly affect land use.

Natural Resources and Energy Supply – The Proposed Action is the construction of a new 16-gate Airside D. Construction of the project would require prefabricated building components, aggregate, sub-base materials, and oils. However, it would not create a demand for construction materials that would be in short supply, produce scarcity of high-commodity resources, or deplete rare or valuable sources of raw materials unique to the area. Operationally, the Proposed Action would create additional demand for potable water, sewer services, electricity, and other utilities at TPA.

The construction and operation of the Proposed Action will cause an increase in electricity consumption. Tampa Electric Company (TECO) provides electric to TPA and can generate enough electricity to meet the expected increased needs. Additionally, TPA has implemented a Sustainability Management Plan with a goal to reduce electricity consumption. TPA has installed energy-efficient lighting and 176,000 square-feet of solar arrays which has resulted in a 13% reduction in electricity use between 2019 to 2021. The project may also include energy efficient features such as LED lighting, energy-efficient light fixtures, and solar tinted exterior glass further mitigating the increase in electricity needs.

Projected water consumption was calculated using Airside C, which is the largest and most recently constructed airside. HCAA's water consumption records show that Airside C annually uses about 20.3 million gallons of water (about 63.31 gallons of water per square foot of space). Airside C's average daily water use is about 55,516 gallons (i.e., 20.3 million gallons divided by 365 days). The 63.31 gallons-per-square-foot of space was calculated for the Proposed Project's 563,000- square-foot facility. The Proposed Project is calculated to use about 35.6 million gallons of water annually (about 97,654 gallons per day). This total does not include the HCAA's ongoing sustainability goals to reduce water consumption at the airport. The Proposed Project's total water consumption is well below the City's average water production per day of 81 million gallons (0.12 % of the City's daily water production). Therefore, the operation of Airside D is not anticipated to constrain the local water supply.

Construction of the Proposed Project would temporarily increase fuel usage from construction related vehicles accessing the Direct Study Area. In addition, the Proposed Project could include diesel generators for backup electrical needs. The operation of the Proposed Project would increase aviation fuel use at the airport. In 2032, the Proposed Project would increase aircraft operations by 2,000. Compared to the airport's total forecast of approximately 287,400 operations in 2032, this increase in operations is 0.70% greater than the No Action Alternative. Although the project would result in an increase in aviation fuel, it is not to a level that would significantly impact local fuel supplies.

The implementation of the Proposed Action is not expected to exceed current or future energy supplies. Based on the analysis in the EA, the Proposed Action would not have a significant impact on natural resource or energy supplies.

Noise and Noise-Compatible Land Use – The construction and operation of the proposed project will generate increased levels of noise. There are 14 housing units located approximately one and a half miles south of the approach end of runway 1L. These units are currently within the Day-Night Average Sound Level Contour (DNL 65 dB) noise contour which represents the area around the flight path that is the most affected by changes in the noise environment. All 14 of these units have previously participated in TPA's Voluntary Noise Abatement Program and have received in-home soundproofing.

Construction noise would temporarily increase sound levels in the immediate vicinity of the construction activities. The potential noise impact associated with the operation of machinery on-site would be temporary and can be reduced using construction timing and staging. To further minimize noise impacts, construction equipment would be maintained to meet manufacturers' operating specifications. In addition, contractors will follow all local land development codes and noise ordinances during construction of the Proposed Action.

As described in Section 3.4.5 of the EA, the effects of the additional operations were assessed for impacts to noise sensitive areas. The Proposed Action will increase annual aircraft operations by 462 in 2027 and 2,000 in 2032. Due to the larger increase in operations, the Proposed Action study year 2032 was compared against the No Action alternative to assess impacts. Since the project just proposes to change operations and with no change in flight path, flight profile, fleet mix, or runway modification, the FAA's Area Equivalent Method (AEM) was used for the analysis. The AEM analysis results indicate that the Proposed Action would increase the DNL 65 dB contour area by 0.6% (approximately 19 acres) in 2032. Per FAA's regulations, an increase of less than 17% indicates no significant noise impacts and no further analysis is required.

In 2032, noise generated by the Proposed Action would have a minimal effect on aircraft noise generated at the airport. The change in noise associated with the Proposed Action would be negligible and would not be noticeable. There are no additional noise sensitive sites within the DNL 65 dB contour area as a result of the Proposed Action. Other noise sources associated with the Proposed Action, including construction, would not generate

substantial noise near noise sensitive areas and no mitigation is warranted. Therefore, there is no significant impact to noise as a result of the Proposed Action.

Socioeconomics, Environmental Justice, And Children's Environmental Health and Safety Risks – The Proposed Project would not affect public service demands and would not require the acquisition of land nor would it displace any residences or businesses. The Proposed Project could increase local employment but not result in any substantial shift in population or increase in local housing demand. The Proposed Project would not result in the acquisition or relocation of any residences, schools, childcare centers, or other similar facilities. No schools or childcare facilities are in areas that would be affected by the Proposed Project. Impacts to air quality and traffic are within established impact significance thresholds and are not expected to impact environmental justice populations. There are 14 housing units located within the DNL 65 dB contour for the Proposed Project, but the noise assessment results only 0.6% (19 acres) increase in the contour area which indicates there will be no appreciable change in the noise environment and all the homes have previously participated in the TPA's Voluntary Noise Abatement Program which installed sound proofing materials. Based on the analysis in the EA, the Proposed Project would not result in any significant socioeconomic, Environmental Justice, and children's health and safety risk impacts.

Surface Transportation – The Proposed Action would result in a temporary increase in local surface traffic volume during construction. Following completion of construction activities, the Proposed Action would result in an ongoing incremental increase in local surface traffic volume. Recently, TPA has completed on-airport roadway improvements and facilities to meet the airport's forecasted 20-year demand.

During the Master Plan Update (MPU) TPA conducted a curbside and roadway Level of Service (LOS) analysis to model modes of travel and roadway characteristics for accessing the airport. LOS grades range from A – Excellent to F – Failure. The 2022 TPA MPU forecast for passengers and operations was used to calculate future curbside and access roadways LOS. The traffic analysis concluded that the airport's curbside LOS through 2032 would be Level D or better. For accessing the airport, approximately 25 on and off airport segments were studied and all resulted in a Level D or greater, with 88% having a LOS B or greater. During peak traffic hours, LOS D - Fair is acceptable and does not warrant corrective action.

The Proposed Action's increased traffic demand would not significantly affect the airport's future curbside or roadways accessing the airport. The Proposed Project would not disrupt local traffic patterns nor substantially reduce the LOS of roads serving the airport. Therefore, the Proposed Project would not cause significant adverse impacts to surface transportation.

Visual Effects Including Light Emissions – The Direct Study Area is located northwest of the Main Terminal at the site of the former Airside D terminal and associated apron area. The viewshed of the Direct Study Area includes airport facilities such as the terminal,

concourses, airport Traffic Control Tower, and hangar facilities. The distance between the Proposed Action and the nearest residential community is approximately 0.8 mile. The Proposed Action occurs entirely on airport and the line of sight between the two will remain obscured by the presence of the Veterans Expressway, Hillsborough Avenue, existing landscaping, a sound wall, and commercial businesses.

Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)

Wetlands – Under the Clean Water Act, the U.S. Army Corps of Engineers has the authority to regulate activities in waters of the U.S., including qualifying wetland areas. No wetlands or other surface waters, which could be considered Waters of the United States are in the Direct Study Area. The permitted stormwater drainage system conveys to a treatment pond, then the Sweetwater Creek outfall and, ultimately, Old Tampa Bay. Due to the lack of wetlands and use of the permitted stormwater treatment system there would be no significant impacts to Waters of the United States by the Proposed Action.

Floodplains – Floodplains are lowland areas that are susceptible to flooding. A review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) shows that approximately 8.2 acres of Zone A Special Flood Hazard Area (SFHA) intersect with the Direct Study Area for the Proposed Action. Approximately 3.2 acres of these floodplains are mapped in areas that are currently impervious surface. As part of this EA process, a study of a range of reasonable alternatives, including different locations for these facilities, was performed. No practicable alternative avoiding floodplain impacts was identified.

Based on FEMA and NEPA guidance, EO 11988, and DOT Order 5650.2, floodplain impacts were evaluated to determine the magnitude and potential effects of 100-year floodplain encroachment. The Proposed Action would include 4.25 acres of new impervious surface in the floodplain, but the existing on-site stormwater management system can handle the additional rainfall runoff without modification due to being in the Tampa Bay drainage basin. The improvements would be designed so the Proposed Action would not be expected to impede floodwater flows during major storm events. Because of the handling capacity of the existing stormwater management system and the drainage proximity to Old Tampa Bay, the Proposed Action is not expected to result in a measurable increase in flood elevation. Additionally, per FEMA FIRM Map 12057C0331J, all impervious encroachment areas are isolated segments of the floodplain and compensation is not required because they are small, isolated and would not induce off-site impacts.

The Proposed Project's floodplain encroachment would not cause of loss of human life and it would not cause future damage that could be substantially costly or widespread, including loss of a vital transportation facility. The encroachment would not have a notable adverse impact on natural and beneficial floodplain values. As a result, the Proposed Project does not exceed thresholds established for significant floodplain impacts.

Therefore, the Proposed Project would not cause significant adverse impacts to floodplains.

Surface Waters and Groundwater – The Proposed Action will add approximately 4.25 acres of new pavement, but the existing stormwater management system is designed to accommodate the additional rainwater run-off. The stormwater system has been permitted through the Southwest Florida Water Management District and meets water quality treatment criteria.

The airport location is underlain by the Floridian aquifer system, which lies at its closest point 650 feet below the surface. The Proposed Project supports are estimated to only be constructed 30-50 feet below ground level and would not interact with the aquifer. There are no sole source aquifers in the area.

The Proposed Action has the potential to exceed applicable water quality standards during construction. However, the implementation of BMPs and a Stormwater Pollution Prevention Plan (SWPPP) and maintaining compliance with applicable permit requirements will minimize potential water quality impacts. As a result of these control measures, significant and long-term water quality impacts resulting from construction activities associated with the Proposed Action are not anticipated.

There is a possibility of the release of contaminants to groundwater during construction. However, the use of BMPs and a SWPPP to be designed for the Proposed Project would prevent or minimize the potential release of contaminants into groundwater. The BMPs and SWPPP would require measures to prevent spills, offer swift response to accidental spills, and define acceptable on-site storage of fuel and lubricants. Given the availability of regionally accepted BMPs and the design of project-specific plans, the Proposed Project would not have a substantial impact on groundwater resources.

Based on the analysis in the EA, the Proposed Action is not likely to contaminate surface waters or aquifers used for public drinking water supply such that public health may be adversely affected. It will not adversely affect natural and beneficial surface water or groundwater resource values to a degree that substantially diminishes or destroys such values. Therefore, the Proposed Project would not significantly impact surface water or groundwater resources.

Wild and Scenic Rivers – The closest Wild and Scenic River, the Wekiva River, is approximately 94 miles to the northeast of the Proposed Action. The closest river segment on the Nationwide River Inventory (NRI), the Hillsborough River approximately 11 miles to the northeast of the Direct Study Area. The Proposed Action would not impact these rivers.

Cumulative Impacts – The past, present, and future cumulative projects identified in Section 3.5 of the EA have generated, or are anticipated to generate, no to moderate environmental impacts. The projects are subject to different environmental regulatory

programs, some of which may require mitigation to reduce impacts below levels considered significant. The impacts associated with the Proposed Action, when considered in addition to other cumulative projects, are not expected to exceed thresholds that would indicate a significant impact.

OTHER FEDERAL, STATE, AND LOCAL ACTIONS AND PERMITS:

The Tampa International Airport and/or Hillsborough County are required to obtain all permits and regulatory approvals necessary to implement the Proposed Project. The permits identified in the EA are listed below.

- Southwest Florida Water Management District – Environmental Resource Permit
- Florida Department of Environmental Protection – NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities
- Hillsborough County Department of Health – Drinking Water Permit
- Hillsborough County Environmental Protection Commission –- Collection/transmission system construction permit

CONSISTENCY WITH APPROVED PLANS OR LAWS: The Proposed Project is consistent with local plans and ordinances, as well as applicable plans, laws, and administrative environmental determinations of Federal, State, and local agencies. Agencies were notified of the Proposed Project through outreach performed for TPA's Master Plan Update (which featured the project), the Florida State Clearinghouse agency coordination submission, and the public comment period of the EA. No objections or concerns regarding consistency with plans or laws were raised.

MITIGATION MEASURES: Mitigation to reduce impacts below a level indicating a significant impact under NEPA is not required as there were no significant impacts identified by the analysis contained in the EA. The EA describes voluntary measures and Best Management Practices that the Authority will employ to ensure impacts are avoided or minimized, but no mitigation measures were identified.

PUBLIC INVOLVEMENT: Notification letters were sent to select agencies to inform them of the proposed Airside D and preparation of the EA. This included submitting the proposed project to the Florida State Clearinghouse for coordinated state agency review. Additionally, the Florida State Historic Preservation Officer and two federally recognized Native American Indian Tribes were contacted.

Airside D was presented to the public at multiple meetings as part of the 2022 Master Plan Update. One inquiry from a member of the public was received asking if it was possible for the project to be completed sooner than what was scheduled. No other questions or comments were received.

The Draft EA was made available for review by the public, government agencies, and interested parties. The Draft EA was available online at the airport's website for viewing and download. Copies of the Draft EA were also available for review at the Hillsborough County Aviation Authority's administrative office and the Town N' Country Regional Library. A Notice of Availability of the Draft EA was published in the *Tampa Bay Times* newspaper on March 6, 2024. The comment period on the Draft EA opened on March 6, 2024 and closed on April 5, 2024. No comments on the Draft EA were received from Federal, State, or local agencies or the public.

FEDERAL FINDING OF NO SIGNIFICANT IMPACT: After careful and thorough consideration of the facts contained herein, the undersigned finds that the proposed Federal action is consistent with existing national environmental policies and objectives as set forth in Section 101 of NEPA and other applicable environmental requirements and will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to Section 102(2)(C) of NEPA.

APPROVED: JUAN C BROWN Digitally signed by JUAN C BROWN Date: 2024.05.08 08:59:50 -04'00'

Juan C. Brown, Manager, Orlando Airports District Office

DATE: May 8, 2024

RECORD OF DECISION AND ORDER

I have carefully considered the FAA's statutory mandate to ensure the safe and efficient use of the national airspace system as well as the other aeronautical goals and objectives discussed in the EA. My review of the EA and determination regarding issuance of the FONSI included evaluation of the purpose and need that this proposed action would serve, the alternate means of achieving the purpose and need, the environmental impacts associated with these alternatives, and any mitigation necessary to preserve and enhance the human, cultural, and natural environment.

Under the authority delegated to me by the FAA Administrator, I find the FAA Proposed Action described in the attached EA is reasonably supported. I, therefore, direct that action be taken to carry forward the necessary agency actions discussed in the attached EA and FONSI.

APPROVED: JUAN C BROWN Digitally signed by JUAN C BROWN Date: 2024.05.08 09:00:47 -04'00'

Juan C. Brown, Manager, Orlando Airports District Office

DATE: May 8, 2024

Judicial Review

This Record of Decision (ROD) represents the FAA's final decision and approval for the actions identified in the EA and constitutes a final order of the FAA Administrator subject to review by the Courts of Appeal of the United States in accordance with the provisions of 49 U.S.C. § 46110.

Final Environmental Assessment

NEW AIRSIDE D

TAMPA INTERNATIONAL AIRPORT (TPA)

TAMPA, HILLSBOROUGH COUNTY, FLORIDA

Prepared for:

Hillsborough County Aviation Authority

and

U.S. Department of Transportation

Federal Aviation Administration

As lead Federal Agency pursuant to the National Environmental Policy Act of 1969

Prepared by:

RS&H, Inc.

May 8, 2024

This environmental assessment becomes a federal document when evaluated, signed, and dated by the responsible FAA official.

JUAN C BROWN Digitally signed by JUAN C BROWN
Date: 2024.05.08 09:02:51 -04'00'

(Responsible FAA Official)

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PROPOSED PROJECT / PURPOSE AND NEED

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The Hillsborough County Aviation Authority (HCAA or Authority) has undertaken an Environmental Assessment (EA) for the construction and operation of a new Airside D (AS-D) (i.e., Proposed Project) at Tampa International Airport (TPA or Airport). The EA has been prepared pursuant to the National Environmental Policy Act of 1969 (NEPA) and per *Federal Aviation Administration (FAA) Order 1050.1F, Environmental Impacts: Policies and Procedures*, and *FAA Order 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*.

This EA follows the document format described in FAA Orders 1050.1F and 5050.4B. In addition, this document follows the 2020 Council on Environmental Quality (CEQ) National Environmental Policy Act Implementing Regulations regarding an EA not exceeding 75 pages,[1] not including appendices. (CEQ, 2020). ***Table 1-1: Document Organization*** lists the EA's chapters and describes the information contained within each.

Table 1-1: Document Organization

Chapter	Description
Chapter 1: Proposed Project / Purpose and Need	This chapter provides an overview of the Airport, a description of the Proposed Project, and discusses the purpose and need of the project.
Chapter 2: Alternatives	This chapter presents the No Action Alternative and alternatives considered in this EA.
Chapter 3: Affected Environment / Environmental Consequences	This chapter presents an overview of the existing environment in the EA's project study area. It describes the potential effects the alternative would have on each environmental resource identified in the FAA Order 5050.4B.
Chapter 4: Agency and Public Involvement	This chapter summarizes the agency and public involvement conducted for this EA.
Chapter 5: List of Preparers	This chapter lists the FAA, HCAA, Airport, and consulting associates who researched, wrote, reviewed, and documented the EA.
Chapter 6: References	This chapter identifies the reference materials used to prepare the EA.
Appendices	The appendices present relevant material, exhibits, and technical reports developed to prepare the EA.

Source: RS&H, 2022.

[1] "Page" means 500 words and does not include explanatory maps, diagrams, graphs, tables, and other means of graphically displaying quantitative or geospatial information.

1.1 BACKGROUND

Tampa International Airport opened as a commercial airport in 1971 to replace Drew Field (Tampa International Airport, 2021). The Airport is owned and operated by the HCAA, which the State of Florida established in 1945 (Tampa International Airport, n.d.). The HCAA oversees multiple airports within Hillsborough County. TPA is about five miles northwest of downtown Tampa. The Airport has three runways, with the longest Runway 01L/19R measuring 11,002 feet (see ***Figure 1-1***).

TPA supports the local community by providing commercial air services and cargo operations to the west coast region of Florida. Additionally, TPA has multiple fixed-based operators (FBO) and maintenance, repair, and overhaul (MRO) facilities. The TPA Airport Layout Plan (ALP) is shown in ***Figure 1-2***.

The Airport's Main Terminal is a nine-level building constructed in 1971 that contains vehicle parking, ticketing, baggage claim, hotel, restrooms, concessions, and passengers' services (Ricondo, 2022). The Main Terminal is approximately 800,000 square feet (Ricondo, 2022). TPA currently has four airsides at the Airport, supporting airlines (Tampa International Airport, 2022). They include Airside A, Airside C, Airside E, and Airside F. These airsides connect to the Main Terminal at the Airport via automated people movers (APM).

- Airside A is a three-level building commissioned in 1995. Airside A has 14 gates[2]supporting JetBlue, Silver Airways, Spirit Airlines, and United. Airside A is approximately 270,000 square feet and contains gates, holdrooms, concessions, circulation, restrooms, airport security, and an APM station for passengers (Ricondo, Master Plan Update (draft), 2022).
- Airside C is a two-level building commissioned in 2005. Airside C has 16 gates, each with a passenger boarding bridge, supporting Alaska Airlines, Avelo Airlines, Breeze Airways, Southwest Airlines, and Sun Country airlines. Airside C is approximately 320,000 square feet and includes holdrooms, concessions, circulation, restrooms, airport security, and an APM station for passengers (Ricondo, 2022).
- Airside E is a three-level building that was commissioned in 2002. Airside E has 13 gates, each with a passenger boarding bridge, supporting Air Canada, Delta Airlines, and Frontier Airlines. Airside E is approximately 318,000 square feet, which contains gates and includes holdrooms, concessions, circulation, restrooms, airport security, and an APM station for passengers (Ricondo, 2022).

[2] Excludes Gate A1, which will be decommissioned by the TSA checkpoint building addition and Gate A3 because the apron is used for Silver Airways commuter aircraft parking.

Figure 1-1: Airport Location

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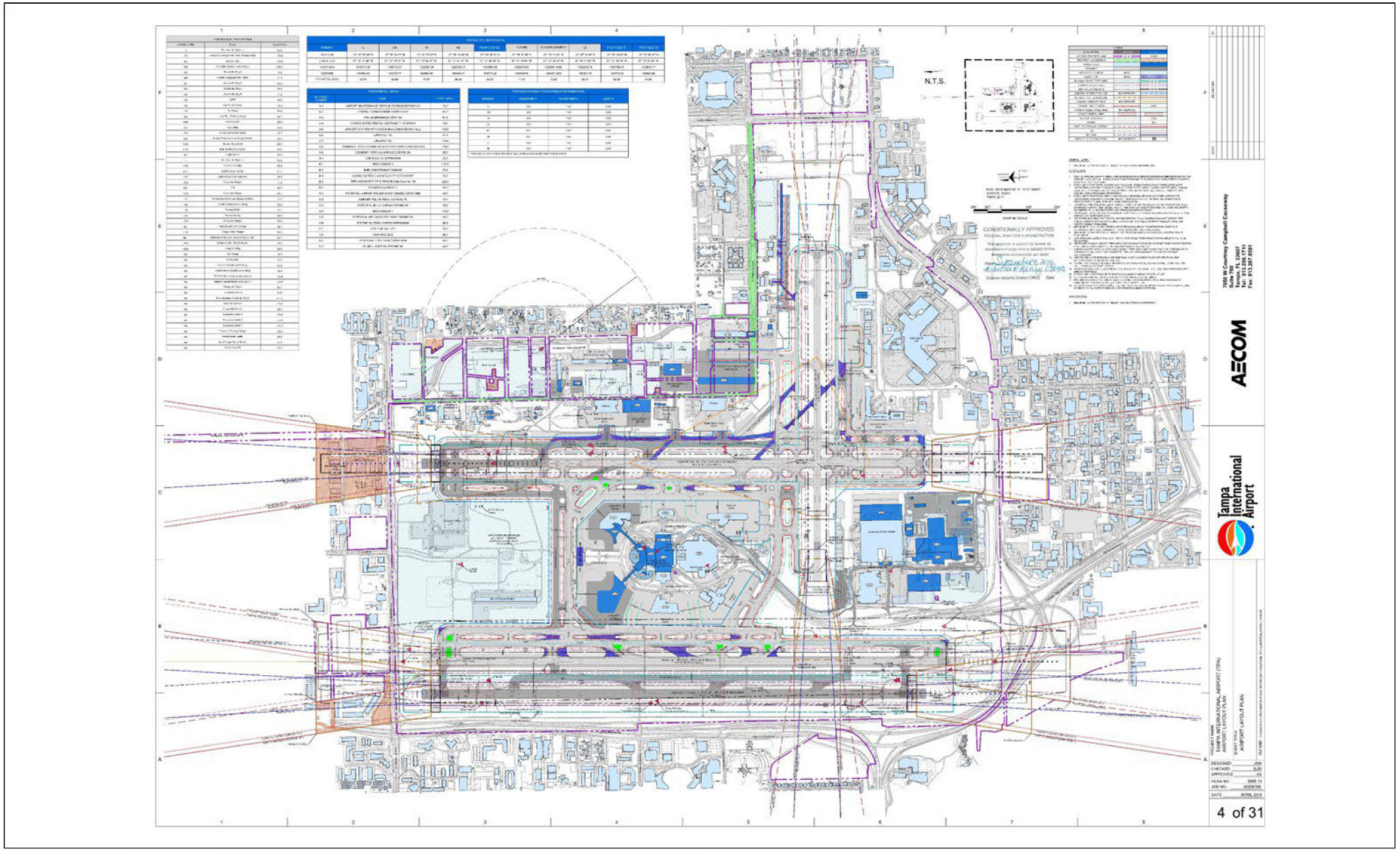
- Airside F is a three-level building that was commissioned in 1997. Airside F has 13 gates, each with a passenger boarding bridge, supporting American Airlines, British Airways, Cayman Airways, Copa Airlines, Edelweiss Air, Eurowings Discover, Havana Air, Invicta Air, and WestJet airlines. Airside F is approximately 300,000 square feet and contains holdrooms, concessions, circulation, restrooms, airport security, and an APM station for passengers (Ricondo, 2022).

The interstate highway system, a toll road, and major north-south and east-west arterial roadways provide regional access to TPA. Most roadways connect directly to the George J. Bean Parkway, the primary roadway for accessing the Main Terminal complex. Bessie Coleman Boulevard is a service road between George J. Bean Parkway and the Aircraft Operations Area (AOA) fence. It is primarily used by delivery and service vehicles to access the airside buildings through control gates. Hoover Boulevard, also a controlled service road, runs along the east side of the Airside D site and crosses under Taxiway B to provide access to the cargo and support facilities located on the Airport's north side.

The Airport has a significant economic impact on the local economy. The Airport has streamlined access to Interstate 75 and Interstate 4, allowing for the quick movement of goods within the State of Florida. The Airport's economic impact supports the employment of approximately 120,000 jobs, which provides $4.5 billion in personal income. The total economic output of the Airport is approximately $14.5 billion (Florida Department of Transportation, 2019).

Airport aircraft operations include corporate/business, general aviation, charter, recreational, and military flights. ***Table 1-2*** shows the FAA's Terminal Area Forecast (TAF) summarizing the Airport's historical and forecasted itinerant, local, and total operations from 2021 to 2032.

Figure 1-2: FAA-Conditionally Approved Tampa International Airport Layout Plan



Source: AECOM, 2016

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Table 1-2: FAA Terminal Area Forecast – Airport Operations

Year	Itinerant Operations	Local Operations	Total Operations	Based Aircraft
2022	205,824	27	205,851	79
2023	238,913	27	238,940	79
2024	254,211	27	254,238	79
2025	258,264	27	258,291	79
2026	262,821	27	262,848	79
2027	267,878	27	267,905	79
2028	272,870	27	272,897	79
2029	277,538	27	277,565	79
2030	281,943	27	281,970	79
2031	286,361	27	286,388	79
2032	290,947	27	290,974	79

Source: (FAA, 2022)

The original Airside D had a Y-shaped footprint, and its two concourses could accommodate 10 Boeing 727-200 aircraft. Airside D ceased operation in 2005 because the airside had exceeded its useful life, and airlines relocated to the then-new Airside C. The previous Airside D was the last of the original airsides and was demolished in 2007 (see ***Figure 1-3***). Since then, improvements have been made to convert the former Airside D site into hardstands for airline and cargo aircraft parking. In 2022, UPS and Amazon cargo operations used the Hardstand D.

Figure 1-3: Airside D – 2005 and 2022

1.2 PROPOSED PROJECT

The HCAA proposes constructing and operating a new 563,000-square-foot Airside D Passenger Terminal (Airside D) to meet its projected demand for operations and passengers (Proposed Project). This includes a three-level airside and 16 contact gates with passenger boarding bridges. The preferred functional arrangement of Airside D by floor level would be as follows:

- Floor Level 1: primarily accommodates explosive detection system, baggage, building service functions, and airline support.
- Floor Level 2: accommodates the Airside D APM station, Transportation Security Administration (TSA) security screening checkpoint (SSCP), and passenger pre-boarding functions (holdrooms, restrooms, dining, shops, passenger boarding bridges).
- Floor Level 3: accommodates the Airside D federal inspection services (FIS) and airline club(s) (Ricondo, Tampa International Airport New Airside D Project Definition Document, 2019).

The aircraft parking capabilities of Airside D would be as follows and illustrated in ***Figure 1-4.***

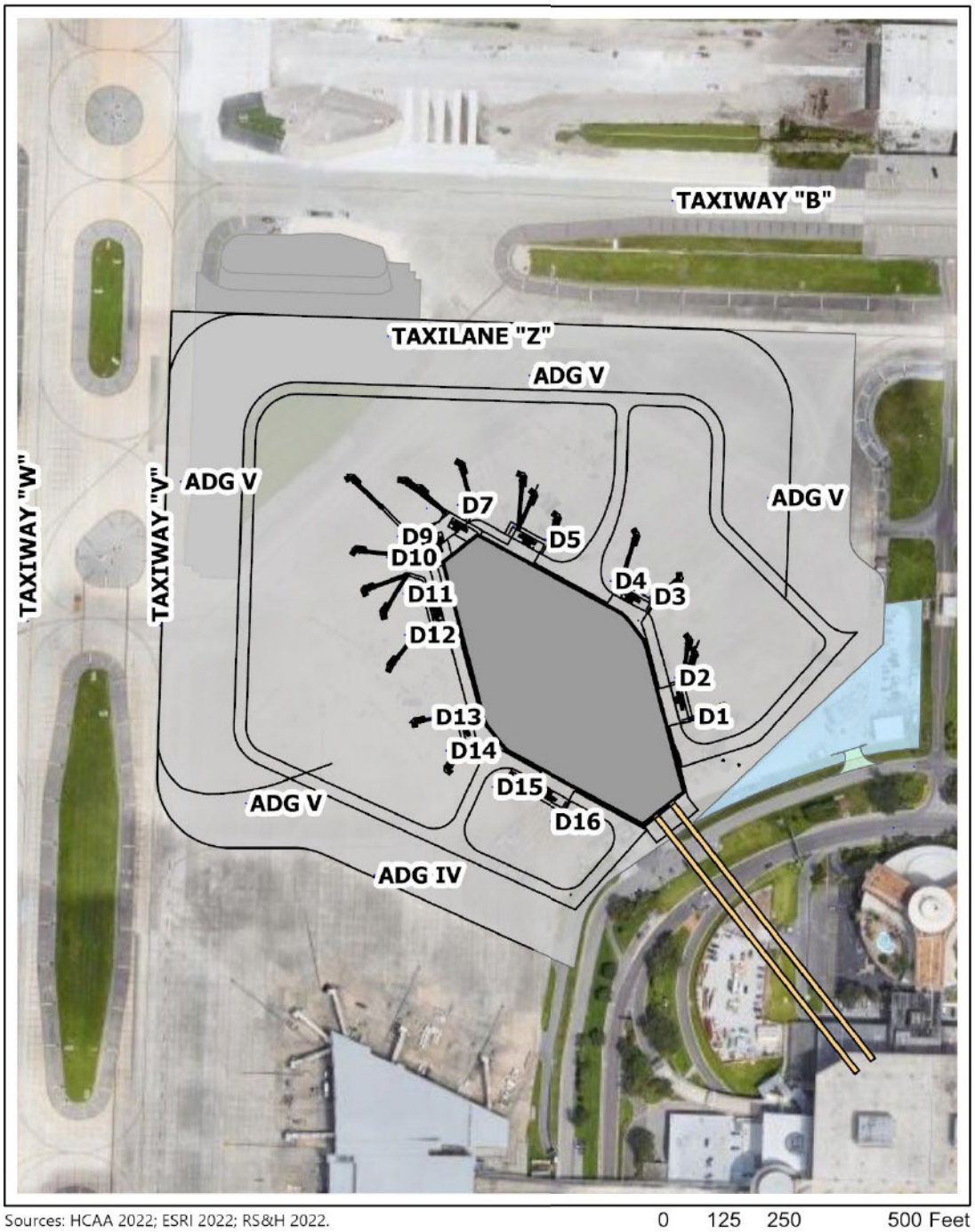
- The maximum narrowbody-only configuration would yield 16 contact gates, with 8 narrowbody gates designed as Multiple Aircraft Ramp Systems (MARS) gates that provide capabilities for either two narrowbody aircraft or a single widebody aircraft in place of the two narrowbody aircraft. To the extent possible, MARS gates will be designed to provide dual passenger boarding bridge (PBB) service to widebody aircraft.
- Maximum widebody configuration would yield 12 contact gates, with 8 widebody and 4 narrowbody gates.
- Maximum narrowbody/widebody mix configuration would yield 16 contact gates, with 4 widebody and 12 narrowbody gates.

Narrowbody gates would accommodate aircraft as large as the Boeing 737-900 or Airbus A321, and widebody gates would accommodate aircraft as large as the Airbus A350-900.

Additional project components that support the Proposed Project include reconstruction of the apron, new hydrant fuel system, construction and operation of a 450-foot-long-dual-guideway automated people mover system (APM) to transport passengers to/from the new airside and main terminal, and an Airport-personnel vehicle parking area with an access gate connected to the existing Airport Access Road. The airside APM station would be outside the sterile airside zone. The APM stations can support up to a pair of two-car trains. Each car can carry 76 passengers. The APM maintenance facility would be located beneath the airside APM station.

Figure 1-4 shows the Proposed Project and connected actions.

Figure 1-4: Proposed Project



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1.3 PURPOSE AND NEED

The purpose and need for an FAA federal action (ALP approval) is to ensure that proposed improvements do not adversely affect the safety, utility, or efficiency of the Airport. Pursuant to 49 U.S.C. § 47107(a)(16), the FAA Administrator (under authority delegated from the Secretary of Transportation) must approve any revisions or modifications to an ALP before a revision or modification takes effect.

According to FAA Order 1050.1F, Section 6-2.1(c), the purpose and need briefly describe the purpose and need for the federal action and provides the foundation for identifying reasonable alternatives to a proposed project. The purpose and need identify the problem facing the airport sponsor (i.e., the "need" for the project) and describes what would be achieved by the proposed project (i.e., the "purpose" of the project).

1.3.1 Need

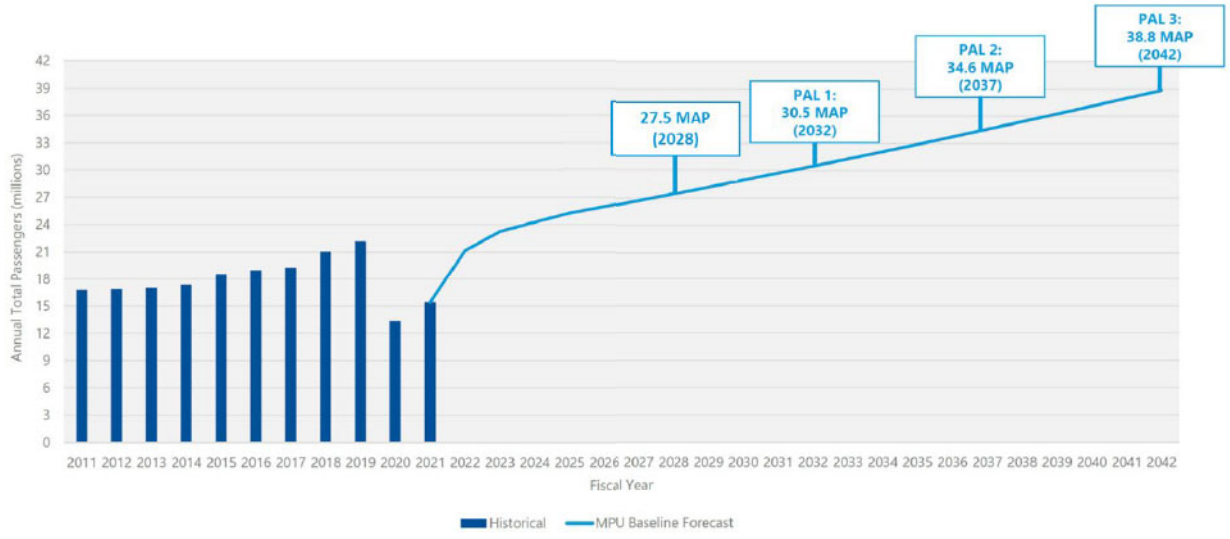
This section presents the HCAA's need for additional contact gates and related passenger handling facilities to accommodate the forecast airline activity.

1.3.1.1 Aviation Forecast

The FAA-approved 2022 TPA Master Plan Update (MPU) forecast for passengers and operations, shown in ***Figures 1-5 and 1-6,*** is within the required 10 percent of the FAA's TAF, which is the variance level deemed acceptable by the FAA and gives the forecasts credibility for impact analysis purposes within a National Environmental Policy Act (NEPA) document. The 2022 TPA MPU forecast projects a quick recovery from the pandemic, followed by a steady increase in total passengers and aircraft. As at all U.S. airports, the pandemic severely disrupted passenger airline capacity and aviation demand at TPA. By May 2020, which represented the low point in passenger airline capacity offered, scheduled departing seats decreased to 24.0 percent of May 2019 capacity for all U.S. airports and 24.9 percent of May 2019 capacity at TPA. Airline capacity started to recover in June 2021, particularly in areas with access to sun and leisure activities, such as Florida. Demand for travel to or from TPA outpaced the rest of the nation in FY 2021 and the beginning of fiscal year (FY) 2022. At TPA, scheduled departing seats in January 2022 represented 102.4 percent of January 2019 departing seats, while nationwide, January 2022 was 92.8 percent of January 2019 volumes.

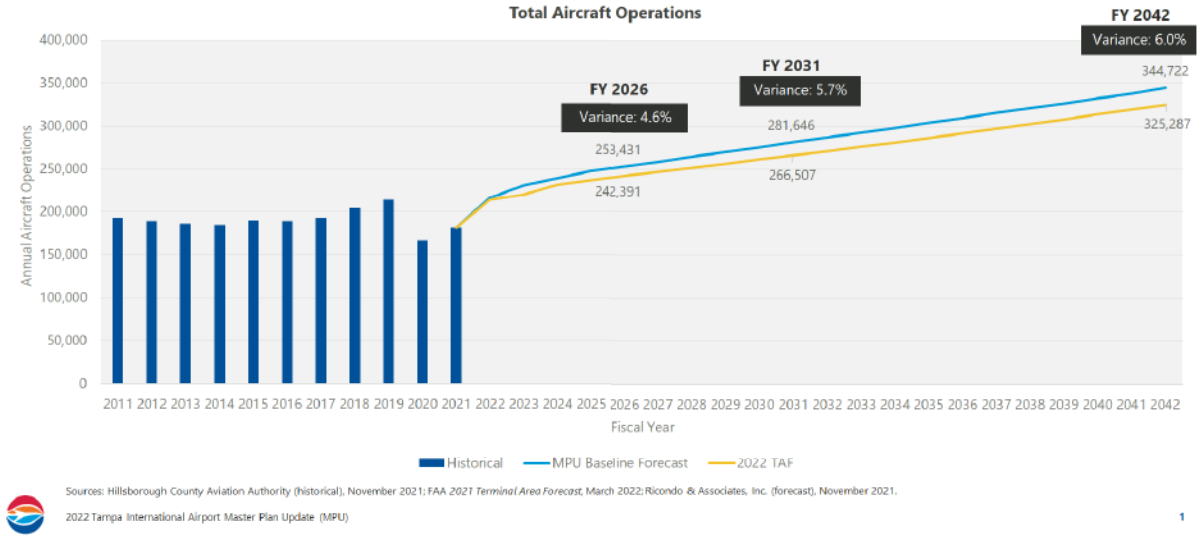
The pandemic temporarily disrupted the relationships between passenger volumes and drivers traditionally used to project demand, such as Gross Domestic Product (GDP), employment, and other socioeconomic factors. As modeled, overall growth continues even though pandemic-related influences affect some segments of passenger activity through 2025.

Figure 1-5: 2022 MPU Planning Activity Levels (PALS)



Source: Ricondo and Associates, 2022.

Figure 1-6: Total Aircraft Operations Forecast Comparison – 2022 TAF



Source: Ricondo and Associates, 2022.

The TPA forecast considered the following during the period when passengers and operations would still be influenced by the effects of the pandemic:

- airline capacity and load factor recovery at TPA;
- airline capacity recovery at airports served by TPA and in the industry overall;
- economic recovery forecast for the region and in regions served from TPA;
- the historical revenue produced by passengers in the individual markets served from TPA;
- input from (Fall/Winter 2021) the primary passenger and air cargo carriers that operate at the Airport to gather information on nationwide and local market trends, future flight schedules, existing and future aircraft fleet mix, etc.; and
- other forecasts developed for the Airport (specifically the FAA Terminal Area Forecast).

As the pandemic's influences on passenger demand diminish, the traditional relationships between demand and socioeconomics will drive long-term passenger growth, especially economic and demographic changes in the Airport Service Area. Specific trends and events that drive economic activity within the greater Tampa Bay area were identified as follows:

- Nine companies have relocated their headquarters to the Tampa Bay region since January 2021[3]
- Tampa Bay is among the nation's ten fastest-growing metro areas for entrepreneurs[4]
- Tampa Bay is ranked third nationally in terms of workforce confidence[5]
- The Tampa-St. Petersburg-Clearwater MSA places in the first quintile of employment growth since calendar year (CY) 2018[6]
- The cruise industry resumed operations from Port Tampa Bay in October 2021, with over 100 cruise ship departures scheduled for the 2021-2022 season.[7]

Long-term forecasts were developed based on origin and destination (O&D) passenger itinerary type to determine a passenger's true journey and forecast using socioeconomic regression analysis techniques that identified predictive statistical relationships between TPA's historical domestic and international O&D passenger volumes and socioeconomic variables (such as population, employment, per capita personal income).[5] The resulting regression equations were then populated with independent forecasts of the relevant socioeconomic variables,[5]

[3] https://www.bizjournals.com/tampabay/news/2021/10/14/st-pete-fortune-500-relocation-incentives.html, accessed November 2021.

[4] https://www.bizjournals.com/orlando/news/2021/10/25/orlando-entrepreneurs-fastest-growing.html, accessed November 2021.

[5] https://www.linkedin.com/feed/update/urn:li:activity:6725097956262989824, accessed November 2021.

[6] Moody's Analytics, Inc., "Précis U.S. Metro - Tampa-St. Petersburg-Clearwater FL," October 2021.

[7] https://www.cruiseandferry.net/articles/cruise-operations-to-resume-at-port-tampa-bay-in-october-1, accessed October 2021.

yielding a range of potential O&D passenger growth. The relationships selected for use in this forecast of O&D passengers include local personal income per capita and gross regional product (GRP), as well as U.S. total earnings and GDP, with additional trends considered for international O&D passengers. The forecast methodology describes that each airline's connecting passengers as a percentage of its total passengers would remain constant during the forecast period due to the Airport's geographic location and lack of a carrier that uses TPA as a hub for its operations.

1.3.1.2 Inadequate Passenger Contact Gates

As described earlier, TPA has 57 total narrowbody contact gates[8] in four airsides (A, C, E, and F). In conjunction with the annual forecasts, Design Day Flight Schedules (DDFS) were developed for 2023, and the three planning activity levels are noted in ***Figure 1-5***. DDFS represents the Airport's daily pattern for airline service on an average weekday of the peak month, providing information on a flight-by-flight basis pertaining to the time of aircraft arrival or departure, airline, aircraft type, domestic/international designation, O&D, seat capacity, load factor, and originating/terminating passenger percentages. The DDFS also assigned flights to specific gates to ensure the extent that flights and aircraft types were accommodated on existing gates and to identify new gates or hardstand requirements required to meet demand. Gating is done iteratively, and specific assumptions are applied to address gate utilization and reflect the Airport's unique physical, operational, and air service environment. The TPA FAA-approved MPU annual forecast and the resulting DDFS indicate that TPA would have a deficit of 8 gates by 2028, 13 gates by 2032, and 19 gates by 2042.

The CY 2022 DDFS, based on schedules published by the airlines, reported 540 passenger airline operations, with 20 airlines providing scheduled passenger service. Of these airlines, 13 were U.S. airlines, and seven were foreign airlines. The Airport has the benefit of a stable air carrier base. For example, of the airlines currently serving the Airport, nine have continually operated at the Airport since FY 2012, and 14 have operated at the Airport since FY 2016. The Airport's top 20 domestic O&D markets represent nearly two-thirds of total domestic O&D demand. These top markets are served by a broad base of airlines, which supports competitive air fares. Of the top 20 domestic markets, all were served on a nonstop basis by more than one carrier, and 16 were served nonstop by at least three airlines. Notable airlines growing at the Airport include ultra-low-cost carriers Spirit Airlines and Frontier Airlines, which more than doubled their enplaned passenger volumes between FY 2017 and FY 2019. The combined market share of the ultra-low-cost carriers accounted for 17.02 percent of total passengers in FY 2021.

Based on input from the primary airlines, a 2023 DDFS was developed. It reflected a 7.4 percent compounded annual growth rate (CAGR) from 2022 operations or 580 total passenger airline

[8] Contact gate provides access to a parked aircraft by way of a passenger boarding bridge from an adjacent concourse/airside.

operations from 22 airlines providing passenger service. ***Table 1-3*** summarizes the gate utilization metrics from the 2023 DDFS.

Table 1-3 shows the average number of turns (a flight arrival or departure) per gate for Airsides A, C, and E, ranging between 5.7 and 6.9 turns. Based on research conducted by ACRP,[9] many airports define full gate utilization at 6-8 turns per gate. Airside F experiences fewer turns per gate because Airside F serves all TPA's non-precleared international flights. International service, particularly widebody aircraft used for long-haul flights, inherently requires longer ground times.

Table 1-3: 2023 Design Day Flight Schedule Gate Utilization Summary

Airside	Narrowbody Gate Inventory	Daily Flights	Turns per Gate	Peak Period Gates in Use
Airside A	14	97	6.9	14
Airside C	16	96	6.0	15
Airside E	13	74	5.7	11
Airside F	13	59	4.5	9

Source: Ricondo and Associates, Inc. 2023

Table 1-3 also shows Peak Period Gates in Use, representing the highest number of gates simultaneously being used to enplane or deplane aircraft at each Airside. Peak periods could occur multiple times each day depending on the Airside but do not include periods when gates are used for remain-overnight aircraft. Airside A gates are used 100% during the peak periods, and Airsides C and E gates use 94 percent and 85 percent of their gates during peak periods, respectively. ***Table 1-3*** shows Airside F utilizing 9 out of its 13 narrowbody gates; however, widebody aircraft used by European airlines (British Airways, Edelweiss Air, and Eurowings) are the equivalent of one and one-half to two narrowbody gates, depending on which Airside F gates are used to park widebody aircraft. The 2023 DDFS included 3 widebody aircraft simultaneously on the ground, leaving 8 gates to accommodate narrowbody aircraft. This widebody/narrowbody gate configuration results in a total gate count of 11 gates under the widebody/narrowbody configuration compared to 13 gates under a narrowbody only configuration. Airside F gate capacity is limited to 4 international widebody aircraft based on apron depth, line-of-sight from the ATCT, and gates connected to the Customs and Border Protection sterile corridor that must be used by deplaning passengers to access the ramp level Federal Inspection Service (FIS) facilities. In this 4 widebody configuration, Airside F could simultaneously accommodate 6 narrowbody aircraft, which results in a total gate count of 10

[9] Airport Cooperative Research Program, Report 30-Reference Guide on Understanding Common Use at Airports

gates in this widebody/narrowbody aircraft configuration compared to 13 gates under a narrowbody only configuration. ***Table 1-3*** summarizes the Airside F DDFS peak period demand for gates considering the mix of widebody and narrowbody aircraft on the ground normalized to narrowbody equivalent gates.

Table 1-4 shows that 100% of Airside F gates could be utilized during the peak period, according to the DDFS. Airside F will have a shortfall equivalent to 2 narrowbody gates by 2028, which will increase to 8 gates by 2042. ***Table 1-5*** summarizes narrowbody equivalent gate requirements based on DDFS correlating to the FAA-approved MPU forecast for annual passengers and operations.

TPA's four physically and operationally separate Airsides greatly limit TPA's opportunities to increase gate utilization in terms of increasing the number of turns per gate or shifting individual flights to take advantage of offset peak gate demand periods among the four airsides. Historically, TPA has moved airlines among the airsides to meet growing demand from existing and entrant airlines; however, there are no future opportunities to rebalance gates without dividing a single airline's flight operations between two or multiple airsides. This will result in confusing wayfinding for departing passengers and is highly objectional to the airlines from an operational efficiency standpoint. Further the Main Terminal's outbound baggage handling system is a point-to-point system, which limits outbound bag delivery between the Main Terminal ticket counter islands to a specific Airside.

Table 1-4: Airside F DDFS Peak Period Demand for Gates

Forecast Year	Widebody	Narrowbody	Narrowbody Equivalent Demand	Narrowbody Equivalent Capacity	Narrowbody Equivalent Surplus or (Deficit)
2023	3	6	13	13	0
2028	5	7	15	13	(2)
2032	0	17	17	13	(4)
2037	1	18	20	13	(7)
2042	7	9	21	13	(8)

Source: Ricondo and Associates, Inc. 2023.

Table 1-5: TPA Narrowbody Equivalent Gate Requirements

Airside	Existing Gates	2028	2032	2037	2042
Airside A	14	17	18	18	21
Airside C	16	17	18	18	20
Airside E	13	15	16	16	20
Airside F	13	15	17	20	21
Total	56	64	69	75	82
Surplus/(Deficit)		**(8)**	**(13)**	**(19)**	**(26)**

Source: Ricondo and Associates, Inc. 2023.

1.3.1.3 Meet Federal Inspection Services Gate and Facilities Requirements

Strong international growth has resulted in the Authority reaching capacity with its existing international arrivals facilities in Airside F. International passengers arriving at the Airport are subject to inspection by Customs and Border Protection (CBP) officers for compliance with immigration, customs, and agriculture regulations. CBP inspections are currently conducted upon arrival at the Airside F Federal Inspection Services (FIS) facility. CBP provides guidelines (i.e., Airport Technical Design Standard) to airports that prescribe requirements for specific spaces, square footage of spaces, and equipment based on the expected peak hour volume of arriving international passengers. The existing Airside F FIS can support 900 peak hour passengers. Based on CBP guidelines, the requirements for the existing FIS facility should be increased to accommodate 1,850 peak hour passengers, which is double the capacity of the existing FIS.

1.3.2 Purpose

The purpose describes how a proposed project would provide a solution to the needs the Airport is facing. The HCAA is proposing improvements at the Airport that would meet projected passenger and airline (domestic and international) demand and proactively prevent near-future congestion.

1.4 REQUESTED FEDERAL ACTIONS

The increasing demand for domestic and international flights necessitates the development of additional gates and associated airside passenger facilities to accommodate future growth effectively. The HCAA is proposing improvements at the Airport that would meet projected passenger and airline (domestic and international) demand and proactively prevent near-future congestion (i.e., Proposed Project).

The following are the federal actions for the Proposed Project.

- Unconditional approval of the Airport Layout Plan (ALP) to depict the proposed improvements pursuant to 49 USC § 40103(b) and 47107(a)(16).
- Determinations under 49 USC 47106 and 47107 relating to the eligibility of the Proposed Project for federal funding under the Airport Improvement Program (AIP) and/or determinations under 49 USC 40117, as implemented by 14 CFR 158.25, to impose and use passenger facility charges (PFCs) collected at the airport to assist with construction of potentially eligible development items shown on the ALP including the proposed construction of Airside D and associated actions.

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2
ALTERNATIVES

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This chapter describes the Proposed Project (i.e., the proposed new Airside D) and the alternatives considered. CEQ regulations (Title 40 Code of Federal Regulations [C.F.R.] Section 1502.14) regarding implementation of the National Environmental Policy Act (NEPA) require that federal agencies rigorously explore and objectively evaluate all reasonable alternatives and, for alternatives which were eliminated from detailed study briefly discuss the reasons for elimination.

As stated in Federal Aviation Administration (FAA) Order 5050.4B, paragraph 706 (d)(7), an alternative can be eliminated from further consideration when the alternative has been judged "not reasonable." Whether a proposed alternative is reasonable depends, in large part, upon the extent to which it meets the purpose and need for the Proposed Action (FAA Order 1050.1F, paragraph 7-1.1[e]). In addition, 40 C.F.R. 1502.14(c)[2020] requires the evaluation of the No Action Alternative regardless of whether it meets the stated purpose and need or is reasonable to implement.

2.1 ALTERNATIVES CONSIDERED

This section describes the alternatives considered to the Proposed Project. ***Table 2-1*** lists the alternatives. In addition, NEPA requires agencies to include a "no action" alternative in NEPA analyses and to compare the effects of not taking action with the effects of the action alternative(s). The No Action Alternative is a baseline for assessing the Proposed Project's effects.

Table 2-1: Alternatives Considered

Title	Description
No Action Alternative	"Do nothing" alternative
Proposed Project	Construction and Operation of Airside D
Alternative 1	Use of Hardstands A and D
Alternative 2	Demolition of Existing Baggage Sorting Facility and Construction of a New Airside
Alternative 3	Construction and Operation of a New North Terminal

Source: RS&H, Inc. 2023

2.1.1 No Action Alternative

Under the No Action Alternative, the Proposed Project (i.e., a new Airside D) would not be constructed. The Airport would operate its passenger handling processes with current Airsides A, C, E, and F, with passengers and flight crews accessing commercial passenger aircraft through 57 contact gates. This alternative would not involve airside improvements beyond those already programmed or that the Airport will undertake for safety, security, or maintenance reasons. Programmed airside improvements to improve the Airport's passenger handling facilities underway during this EA include expanding Airsides A and E buildings' footprint to

improve the SSCP operations by 2024 (see ***Section 3.5***, Cumulative Projects, for further details). The No Action Alternative would not satisfy the Purpose and Need of the project.

2.1.2 Alternatives Considered but Eliminated from Further Consideration

According to NEPA, alternatives considered but not found to be technically feasible or reasonable should be presented briefly, along with the reasons they were eliminated from further analysis. Examples of reasons for elimination are (1) failure of the alternative to meet the requirements of the purpose of and need for the action, (2) the alternative cannot be technically implemented, or (3) the alternative cannot be reasonably implemented. This EA's alternatives evaluation considers meeting the Purpose and Need and the alternatives' safety, economic, technical, and engineering factors.

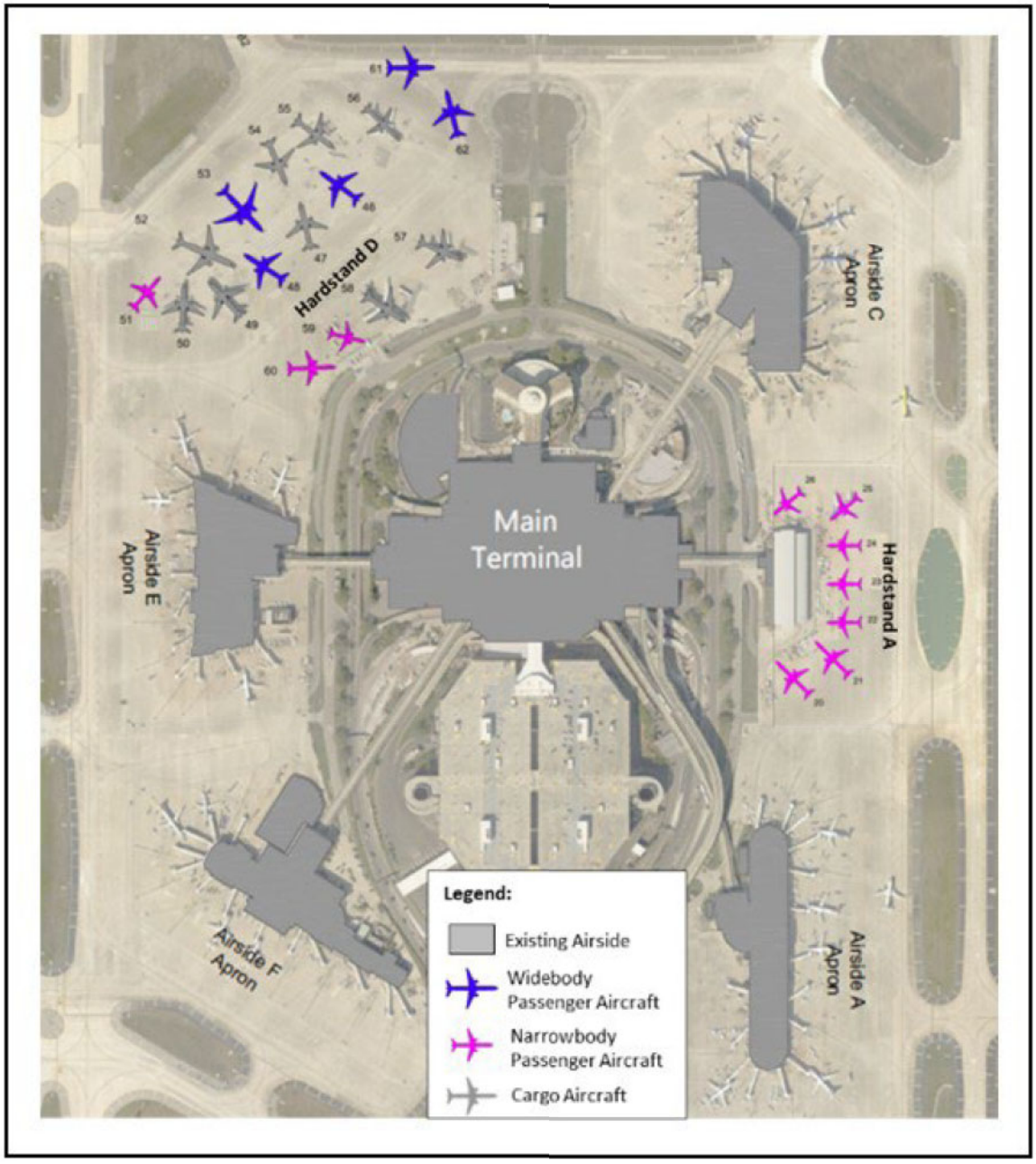
2.1.2.1 Alternative 1: Use of Hardstands A and D

Alternative 1, the use of Hardstands D and A, was considered to accommodate the forecast of passengers (see ***Figure 2-1***). Hardstand D currently accommodates 17 aircraft (5 - widebody passenger aircraft, 3 – narrowbody passenger aircraft, and 9 – cargo aircraft (8 widebody and 1 narrowbody gates)). The A Hardstand currently accommodates 7 narrowbody aircraft.

Passengers boarding and deplaning aircraft on A and D Hardstands would need to be bussed to another airside and existing gate to transfer to the Main Terminal, affecting airfield operations, passenger safety, and passenger experience. TPA does not have existing available gates for these hardstand operations. The use of A and D Hardstands for passenger boarding and deplaning would require the use of functional areas[10] at another TPA airside, however, the Airport does not have the functional area capacity to manage these passengers. In addition, this will result in confusing wayfinding for departing passengers and is highly objectional to the airlines from an operational efficiency standpoint.

[10] Functional areas include security screening checkpoints (SSCP), holdroom space, baggage-makeup, restrooms, food/beverage, and retail.

Figure 2-1: Alternative 1: Use of Hardstands A and D



Sources: Tampa International Airport, 2021 (aerial photography); AECOM, Tampa International Airport, Airport Layout Plan, April 2016; Ricondo, 2022

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Hardstand A and D operations would also affect the function of the existing airsides and airfield, passenger safety, as well as the passenger experience both for the passengers that would need to "share" the functional areas in other TPA airsides as well as for the passengers using aircraft parked at hardstands. There are several reasons why Alternative 1 is not reasonable, including the following:

- Maintain Compliance with the Americans with Disabilities Act of 1990 (ADA) - The efficient, convenient, and comfortable transfer of passengers with disabilities between the airside facilities and aircraft is considered a quality of service offered by airport facilities. Title III of the ADA requires places of public accommodation to be designed, constructed, and altered in compliance with established accessibility standards. Contact gates preclude the need for disabled passengers to utilize and navigate circuitous pathways, ramps, and stairways that, by design, offer challenges to transferring passengers with disabilities. The vertical transfer of passengers between the airside departure level and the apron loading area utilizing walkers, wheelchairs, or motorized carts requires specialized lifts to provide safe passenger access to certain airside doorways or aircraft cabin door sills. The seasonal summer meteorological conditions (i.e., rain, lightning) experienced at TPA would further exacerbate discomfort for disabled passengers using Hardstand A and D remote gates instead of contact gates.
- Limit Use of Aircraft Auxiliary Power Units (APU) - The availability of pre-conditioned air and electrical service at a contact gate and within parked aircraft during the enplane/deplane operations reduces the need for portable air conditioning and power-generating units. Hardstand A and D gate positions require an extensive network of portable or permanent apron-based auxiliary power and air conditioner units. In addition, the use of portable generating units and air conditioners would result in an increased level of onsite air emissions and noise levels for passengers and Airport and airline personnel. Limited On-Demand Hardstand Positions and Safety – The Hardstand A and D gate system offers limited freedom in the on-demand relocation of hardstand gate positions. It takes up apron areas required for aircraft taxi movement and service vehicle access. The added presence of objects and mobile carts could present a safety hazard when moving around the active apron areas.
- Limit Use of Ground-Based Passenger Transport Vehicles - Using Hardstand A and D gate positions at locations distant to the departure level hold room would require using transport vehicles such as buses or trams. Hardstand gate-positioned aircraft would result in airfield operational delays generated by vehicular traffic on and around the airside apron, apron-area taxilanes, and aircraft taxi areas.
- Provide a Secure Environment for Airside Operations - The increasing level of airside security concerns within the airside and apron areas at airports impose further restrictions and considerations for limiting airside-to-aircraft passenger transfer using

hardstand gate positions. When such activities occur, additional airline, Airport, and security personnel are required to escort and monitor the movements of each passenger along pre-planned routes between the airside and the aircraft. This results in additional airfield operational delays at the Airport.

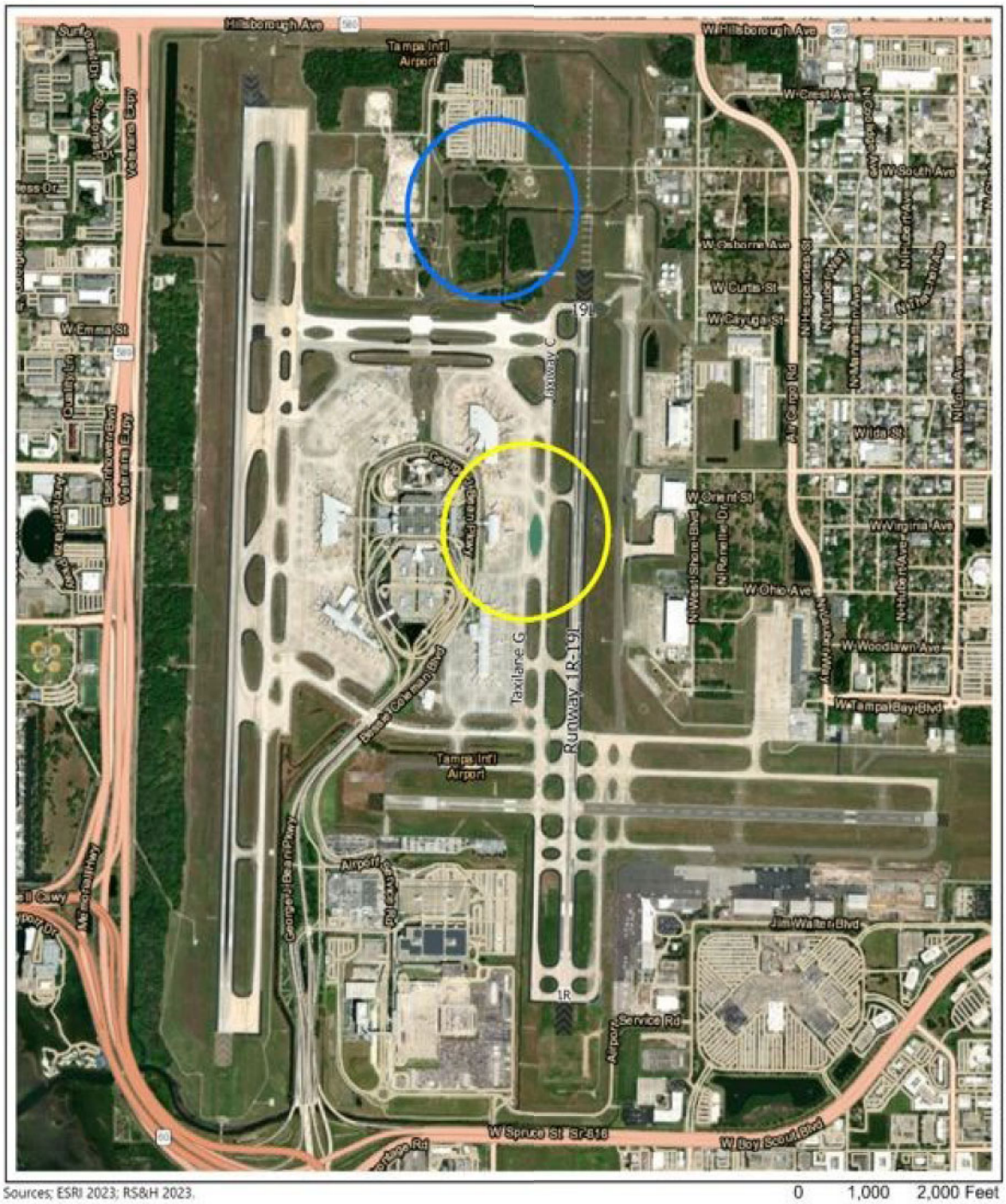
» Maximize Utilization of Contact Gates for Passenger Processing - The Airport's existing system of contact gates offers airline passengers the greatest level of comfort and convenience. The ability to shelter TPA passengers from the seasonal summer meteorological conditions is a primary consideration. Maintaining the level of service to Airport users consistent with that historically provided by the Airport, airside development should incorporate departure-level contact gates.

The use of Hardstands A and D is not reasonable or prudent. Alternative 1 would not meet ADA requirements, require extraordinary APUs, decrease security and safety, severely disrupt airfield operations, result in an unreasonable financial burden on the Authority, and affect passenger experiences. Therefore, Alternative 1: Use of Hardstands A and D was eliminated from further consideration.

2.1.2.2 Alternative 2: Demolition of Existing Baggage Sorting Facility and Construction of a New Airside

Alternative 2 includes demolishing the existing baggage sorting facility between Airsides A and C, relocation of Hardstand A, construction of a new 563,000-square-foot and 16-contact gate airside on that site, and construction of a new baggage sorting facility. The area necessary for a new 563,000-square-foot building with 16 contact gates and an apron area for aircraft movements is about 30 acres. The existing baggage sorting facility and Hardstand A area are about 10 acres (see ***Figure 2-2: Alternative 2 and Alternative 3***). Therefore, a new airside and apron to accommodate the forecast demand could not be accommodated between Airsides A and C. In addition, construction at this on-Airport location, with the same square footage needs as the Proposed Project, would significantly affect the airfield operations. The Airport would need to close/relocate taxiway connectors, Taxilane G, and Taxiway C. Relocating Taxiway C would require the relocation of Runway 19L/1R to the east. This would affect the entire infrastructure on the east side of the Airport, along with aircraft operations on Runway 19L/1R.

Figure 2-2: Alternative 2 and Alternative 3



Demolishing and relocating the existing baggage sorting facility would impact airport infrastructure. Currently, passenger baggage from Airsides E and F is transferred from their respective aircraft by ground support equipment via a tunnel from the westside to the eastside of the Airport to the baggage sorting facility. Baggage from Airsides A and C are also transferred to the baggage sorting facility via ground support equipment. The baggage sorting facility transfers passenger baggage to the Main Terminal baggage claim areas. Without the baggage sorting facility and associated transfer tunnel system, all baggage sorting would be affected by additional ground support equipment in the aircraft operating areas. This would decrease safety and potentially affect aircraft ground operations (i.e., taxiing to and from the airsides). In addition, relocating to a new baggage sorting facility is an unnecessary financial burden for the Authority.

The construction and operation of a new airside with a 563,000-square-foot building and 16 contact gates between Airside A and Airside C is not prudent. This alternative would require extraordinary infrastructure modifications, severely disrupt airfield operations, result in an unreasonable financial burden on the Authority, and affect passenger experiences. Therefore, this alternative was eliminated from further consideration.

2.1.2.3 Alternative 3: Construction and Operation of a New North Terminal

Alternative 3 is for the construction and operation of a new north terminal. Construction and operation of this North Terminal would include an area to facilitate a 563,000 square-foot building, 16 contact gates along with additional square footage for on-Airport roads, passenger arrival and departure curbs, baggage claim and baggage offices, airline check-in facilities, TSA, concessions, and restrooms (see ***Figure 2-2: Alternative 2 and Alternative 3***). This alternative would also require the construction of parking areas to relocate the employee parking on the north side of the Airport along Hillsborough Avenue. As for necessary airfield improvements, this alternative would include a new apron, taxilanes, and taxiways connecting to the existing airfield. New utility lines (e.g., water, electricity, and gas) would need to be connected to existing services.

The extensive construction of this alternative would not be completed when the forecast of demand surpasses the existing airside capacity. This alternative would meet the Purpose and Need. However, the need for extensive terminal and airfield improvements, relocation of tenants and employee parking, and surface transportation improvements would not be reasonable or prudent. Two duplicate terminals (north terminal/existing terminal) would increase the Authority's annual operations and maintenance operating costs and result in difficulties for customers navigating two different terminal complexes. Therefore, Alternative 3, Construction and Operation of a New North Terminal, was eliminated from further consideration.

2.1.3 Unresolved Conflicts Concerning Alternative Uses of Available Resources

According to FAA Order 5050.4B Paragraph 706(d)(5)(a), "Unresolved conflicts may exist between the project proponent and those wishing to use affected environmental resources for non-airport purposes. An unresolved conflict typically exists when an airport development project involves one or more special purpose law." In addition, if there are no unresolved conflicts and alternative uses of available resources, the range of alternatives may be limited to the No Action and Proposed Project (FAA, 2006).

Chapter 3 describes the Proposed Project's potential environmental impacts in accordance with NEPA, as amended, *Council of Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA*, *FAA Order 1050.1F, Environmental Impacts: Policies and Procedures, 1050.1F Desk Reference*, and *FAA Order 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, applicable Executive Orders (EOs), and other applicable federal, state, and local requirements.

Over 90% of the Proposed Project site, northwest of the Main Terminal, is currently paved concrete and used as a hardstand for air cargo operations. The air cargo operations on the existing Hardstand D would be moved to other parts of TPA to new facilities for processing air cargo.

As described in ***Chapter 3***, the Proposed Project would result in minor temporary construction-related impacts associated with air pollutant emissions, solid waste, surface transportation, and stormwater. Compared to a No Action Alternative, the Proposed Project would not result in direct environmental impacts (e.g., floodplains, wetlands, threatened and endangered species). The Proposed Project would have socioeconomic benefits associated with airport and airline employment (e.g., airline staff, janitorial staff, food/beverage concessions, and retail staff). The Proposed Project would result in impacts to aircraft noise, air quality, natural resources, solid waste, visual, and water resources (i.e., stormwater) that do not exceed FAA's significance threshold (see ***Chapter 3*** for further details).

The Proposed Project would add approximately 4.5 acres of impervious surface (i.e., concrete) east of Taxiway V and south of Taxiway B. This area is currently airport-maintained airfield grass and stormwater control. The Airport's stormwater system would need to be slightly modified (e.g., deepened and widened existing stormwater conveyance) to accommodate rainfall runoff from the Proposed Project's additional impervious apron (see ***Chapter 3***).

Therefore, the Proposed Project would not result in unresolved conflicts concerning alternative uses of available resources.

2.2 ALTERNATIVES RETAINED FOR FURTHER CONSIDERATION

Paragraph 6-2.1 of FAA Order 1050.1F states in part: "There is no requirement for a specific number of alternatives or a specific range of alternatives to be included in an EA. An EA may limit the range of alternatives to the proposed action and no action when there are no unresolved conflicts concerning alternative uses of available resources. Alternatives are to be considered to the degree commensurate with the nature of the proposed action and agency experience with the environmental issues involved."

Since there are no anticipated significant adverse impacts to any natural or human resource or unresolved resource conflicts associated with the Proposed Project, only the No Action Alternative and Proposed Project are retained for further consideration. No further "build" alternatives are retained for detailed consideration.

2.2.1 No Action Alternative

The EA retains the No Action Alternative for environmental baseline comparative purposes, to fulfill CEQ regulations (40 CFR Part 1502) implementing NEPA, and to comply with FAA Order 1050.1F, E*nvironmental Impacts: Policies and Procedures*, and FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*. Therefore, the No Action Alternative is retained as the base against which the Proposed Project's potential environmental effects can be assessed.

2.2.2 Proposed Project

The Proposed Project (see ***Chapter 1***) would meet the Purpose and Need to meet the forecast of operations and passengers by providing the airside gate capacity required during the planning horizon and meeting federal inspection service requirements.

The site of the Proposed Project is the only functional location on Airport property connecting to the existing Main Terminal that could accommodate a new airside and require no extraordinary infrastructure modifications to existing TPA facilities (i.e., demolition and relocation of the existing baggage sorting facility and Hardstand A in between Airsides A and C or significant airfield modifications) before the forecast of demand surpasses the existing airside capacity.

Therefore, the Proposed Project is retained for further consideration in this EA.

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3
AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES

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As per the Council on Environmental Quality (CEQ) National Environmental Policy Act (NEPA) Implementing Regulations 40 CFR Parts 1500 -1508, dated 2020, FAA Orders *1050.1F Environmental Impacts: Policies and Procedures,* and *5050.4B National Environmental Policy Act Implementing Instructions for Airport Actions*, this chapter describes the existing environmental condition (i.e., Affected Environment) as well as environmental resources that the Proposed Project may affect (i.e., Environmental Consequences). The analysis of each resource category includes the following:

- Affected Environment: describes the existing natural, ecological, cultural, social, and economic conditions that could be affected by the Proposed Project.
- Environmental Consequences: describes the potential effects of the Proposed Project (compared to a No Action Alternative using the FAA's significance thresholds) and the potential mitigation measures to minimize the effects, if necessary.
    - Potential Effects: The analysis of the Proposed Project's impacts compared to the No Action Alternative's impacts is based on the information known during this EA's preparation.
    - Significance Threshold: Significance thresholds for each resource category described in FAA Order 1050.1F, Exhibit 4-1 aided the analysis provided in this chapter.
    - Mitigation Measures: describes potential mitigation measures related to anticipated impacts.

Data used to determine the Affected Environment was collected by reviewing existing documentation provided by the Airport Sponsor, public databases, consulting with agencies with specific knowledge of a resource category, and conducting field investigations.

As described in ***Chapter 2***, the No Action Alternative is evaluated and compared to the Proposed Project. Not only is the No Action Alternative required to be analyzed in further detail by CEQ regulations[11], but it also provides a baseline comparison for potential impacts resulting from implementing the Proposed Project.

The environmental analyses in this chapter are consistent with FAA Orders *1050.1F* and *5050.4B* and disclose the potential impacts for the projected future conditions in 2027 and 2032. The EA uses 2027 as the projected opening year for the Proposed Project. The 2032 study year is 5 years beyond the proposed opening year and is used for future aircraft noise analyses and potential effects. Compared to the No Action Alternative, the Proposed Project would increase the number of airline operations at the Airport by approximately 462 in 2027 and 2,000 in 2032.

[11] 40 CFR § 1502.14(c)

3.1 PROJECT STUDY AREAS

According to the Desk Reference for FAA Order 1050.1F, a study area can vary based on the impact category being analyzed. A Direct Study Area was established for this EA to identify the environmental resources that may be directly affected by the construction and operation of the Proposed Project within the limits of disturbance. ***Figure 3-1*** shows the Direct Study Area.

The Direct Study Area is located within the Airport property and at the former Hardstand D area, northwest of the Main Terminal. The size of the Direct Study Area is approximately 58 acres and consists of paved concrete and a small drainage swale/airfield turf in the northwest corner. The Direct Study Area contains portions of existing Taxiways B, V, V5, U, and Taxilane Z.

The Indirect Study Area is located on and off the Airport property to evaluate the potential impacts on water resources, visual effects, and surface transportation. The Indirect Study Area is approximately 4,169 acres and comprises aeronautical, residential, and commercial development land uses. ***Figure 3-2*** shows the Indirect Study Area.

To evaluate potential impacts, the analyses in this chapter overlay the components of the Proposed Project and No Action Alternative onto the conditions within the project study areas for each environmental impact category described in FAA Orders 1050.1F and 5050.4B.

3.2 NO ACTION ALTERNATIVE

Under the No Action Alternative, the construction and operation of the proposed Airside D would not occur. The affected environment of the Study Areas under the No Action Alternative would not differ from existing conditions.

Because there would be no anticipated construction or change in Airport facilities under the No Action Alternative, no impacts would be expected to occur related to Air Quality; Biological Resources; Climate; Coastal Resources; DOT Section 4(f) Resources; Hazardous Materials, Solid Waste, and Pollution Prevention; Historical, Architectural, Archaeological, and Cultural Resources; Land Use; Natural Resources and Energy Supply; Noise and Noise-Compatible Land Use; Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks; Visual Effects; or Water Resources in the Direct or Indirect Study Area.

3.3 RESOURCES NOT AFFECTED

The FAA Order 1050.1F describes environmental resource categories evaluated in an EA. The No Action Alternative or the Proposed Project would not affect some listed environmental resource categories. This section briefly explains those environmental resource categories; however, they are not discussed further in this EA because they are not in or near the Direct Study Area.

Figure 3-1: Direct Study Area

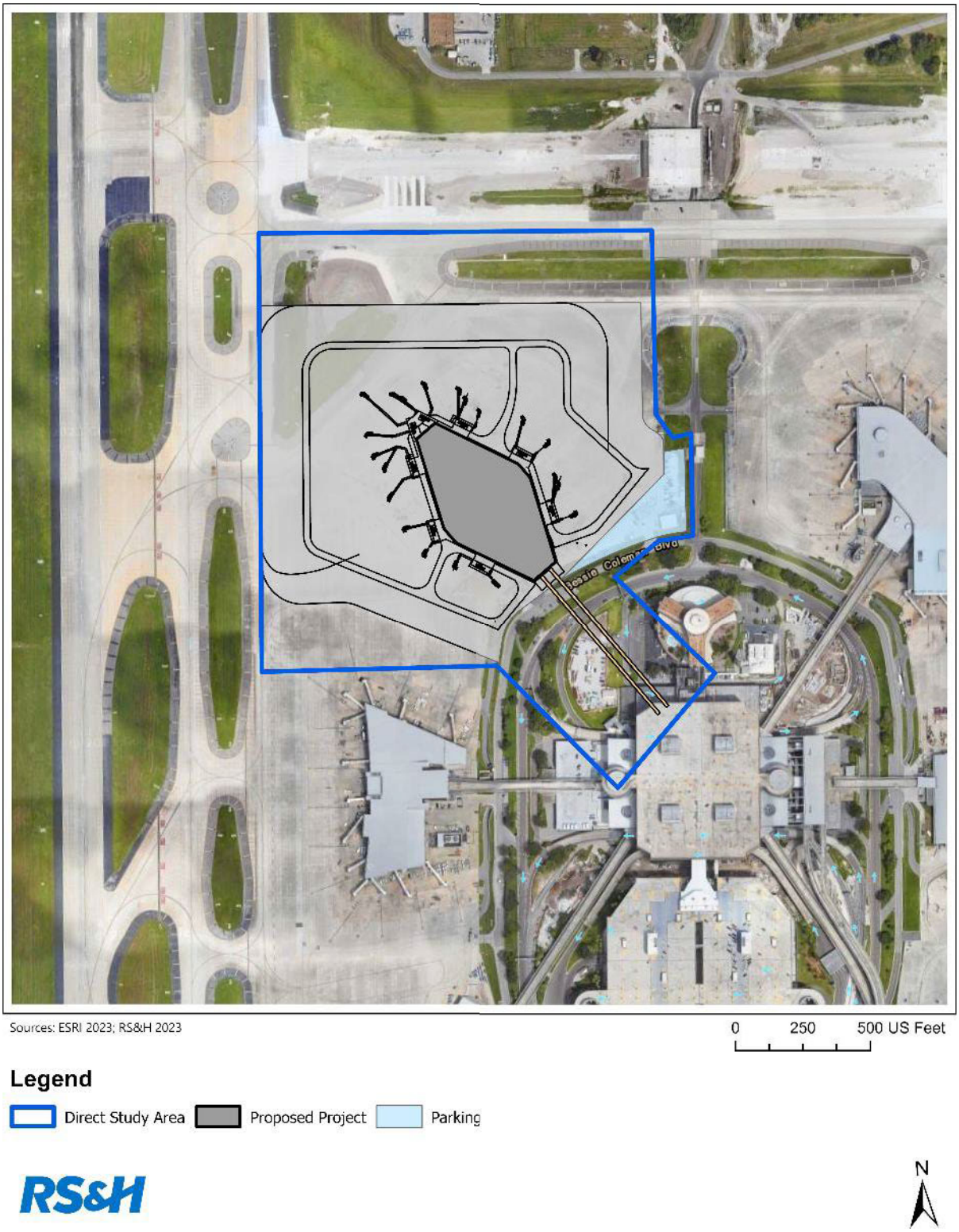
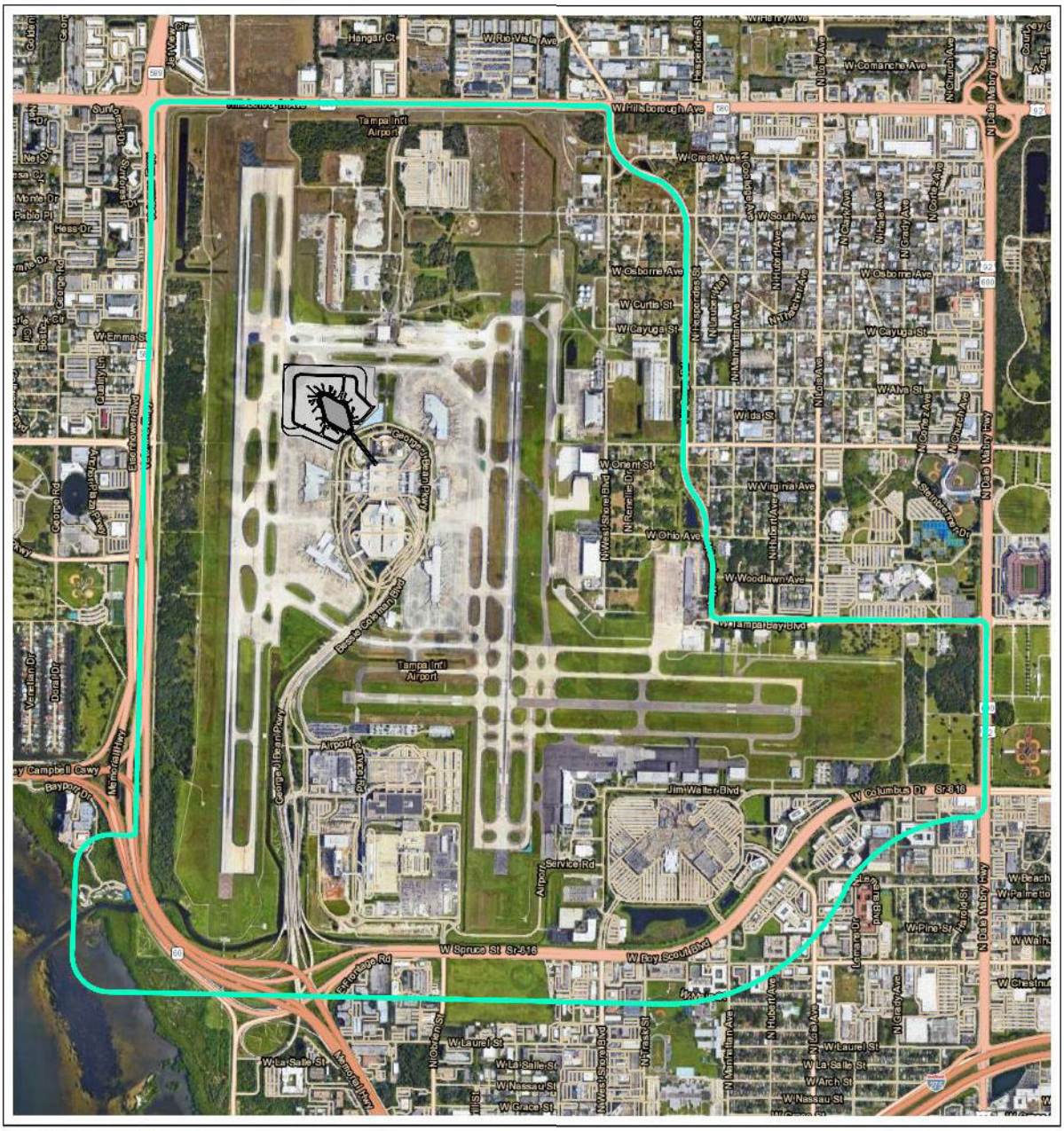


Figure 3-2: Indirect Study Area



Compared to the No Action Alternative, the Proposed Project would not affect the following environmental impact categories:

- Biological Resources (***Section 3.3.1***)
- Coastal Resources (***Section 3.3.2***)
- Children's Environmental Health and Safety Risks (***Section 3.3.3***)
- Environmental Justice (***Section 3.3.4***)
- Farmlands (***Section 3.3.5***)
- Land Use (***Section 3.3.6***)
- Water Resources (***Section 3.3.7***)

3.3.1 Biological Resources

Habitat within the Direct Study Area was inspected in 2023 and classified by the Florida Department of Transportation (FDOT) Florida Land Use, Cover and Forms Classification System (FLUCCS-DOT 1999). As shown in ***Figure 3-3***, the Florida Land Use, Cover and Forms Classification System (FLUCCS) shows the Direct Study Area as 8100 Airport (i.e., runways, intervening land, terminals, service buildings, navigational aids, fuel storage, parking lots and a limited buffer zone).

According to the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC), there are federal species with the potential to occur within Hillsborough County, which includes the Direct Study Area (U.S. Fish and Wildlife Service, 2022). State-protected species within the Direct Study Area were obtained from the Florida Fish and Wildlife Conservation Commission (FWC) and Florida Natural Areas Inventory (FNAI). ***Table 3-1*** identifies the federal and state-protected species and their status. ***Appendix D*** includes the USFWS IPaC and FWC/FNAI lists of federal and state-protected species.

The Direct Study Area is primarily paved concrete and a drainage swale, heavily disturbed, contains no natural habitat, and is not located within a critical habitat area for any threatened and endangered species. None of the listed threatened or endangered species have been observed within the Direct Study Area. ***Table 3-1*** documents the effects determination for each federal and state-listed species.

Figure 3-3: FLUCCS Map of Direct Study Area

Table 3-1: Federal and State Protected Species Potentially Within the Direct Study Area

Common Name	Scientific Name	Status	Effects Determination
Federal			
Crested Caracara	*Polyborus plancus audubonii*	Threatened	No Effect
Eastern Black Rail	*Laterallus jamaicensis ssp. jamaicensis*	Threatened	No Effect
Everglade Snail Kite	*Rostrhamus sociabilis plumbeus*	Endangered	No Effect
Rufa Red Knot	*Calidris canutus rufa*	Threatened	No Effect
Wood Stork	*Mycteria americana*	Threatened	No Effect
American Crocodile	*Crocodylus acutus*	Threatened	No Effect
Eastern Indigo Snake	*Drymarchon couperi*	Threatened	No Effect
Hawksbill Sea Turtle	*Eretmochelys imbricata*	Endangered	No Effect
Monarch Butterfly	*Danaus plexippus*	Candidate	No Effect
Florida Golden Aster	*Chrysopsis floridana*	Endangered	No Effect
Pygmy Fringe-tree	*Chionanthus pygmaeus*	Endangered	No Effect
State			
Gopher Tortoise	*Gopherus polyphemus*	Threatened	No Effect Anticipated
Short-tailed Snake	*Lampropeltis extenuata*	Threatened	No Effect Anticipated
Pine Snake	*Pituophis melanoleucus*	Threatened	No Effect Anticipated
Florida Sandhill Crane	*Antigone canadensis pratensis*	Threatened	No Effect Anticipated
Florida Burrowing Owl	*Athene cunicularia floridana*	Threatened	No Effect Anticipated
Snowy Plover	*Charadrius nivosus*	Threatened	No Effect Anticipated
Little Blue Heron	*Egretta caerulea*	Threatened	No Effect Anticipated
Reddish Egret	*Egretta rufescens*	Threatened	No Effect Anticipated
Tricolored Heron	*Egretta tricolor*	Threatened	No Effect Anticipated
American Oystercatcher	*Haematopus palliatus*	Threatened	No Effect Anticipated
Roseate Spoonbill	*Platalea ajaja*	Threatened	No Effect Anticipated
Black Skimmer	*Rynchops niger*	Threatened	No Effect Anticipated
Least Tern	*Sternula antillarum*	Threatened	No Effect Anticipated

Source: IPaC 2023, FWC 2023, FNAI 2023.

The Bald and Golden Eagle Protection Act of 1940 (BGEPA) protects bald and golden eagles. Although the bald eagle was de-listed under the ESA, it is still afforded protection under the Migratory Bird Treaty Act (MBTA) and the BGEPA. The closest USFWS documented Bald Eagle nest is Nest ID HL 981a, about 3,326 feet from the Direct Study Area (Audubon Center for Birds of Prey, 2022). Management guidelines apply when activity is proposed within 660 feet of a nest; therefore, the Proposed Project would not affect Bald Eagle nests. Due to the highly disturbed nature of the Direct Study Area and the distance to Nest HL 981a, the Bald Eagle would not be adversely affected by the Proposed Project.

According to the FNAI and USFWS, the closest Wood Stork rookery is approximately six miles northwest of the Direct Study Area (USFWS, 2022). The existing characteristics of the Direct Study Area do not provide suitable nesting (e.g., hardwood swamps) for Wood Storks. The Direct Study Area also does not contain suitable foraging habitats, including wetlands that have shallow, open, calm water areas with a water depth between 2 to 15 inches (USFWS, 2010). Wood Storks, protected under the ESA and MBTA, are also highly mobile. According to the USFWS' IPaC's Wood Stork Determination Key, a determination of not applicable for species was determined (see ***Appendix D***). Therefore, there will be ***no effect*** on this species.

The FWC Environmental Sensitivity Index (ESI) was reviewed for land mammals, reptiles, invertebrates, and regional habitats. The data sets contain sensitive biological resource data for threatened or endangered terrestrial mammals, sea turtles, mangrove terrapins, and marine and estuarine invertebrate species in Florida. The ESI Habitat Regions in Florida describes sensitive biological resource data for threatened/endangered/rare terrestrial plants and communities in Florida. According to the FWC ESI data sets, no land mammal, reptile, or invertebrate habitat areas, or listed plants are within the Direct Study Area (Florida Fish and Wildlife Conservation Commission, 2022). See ***Appendix D*** for more information regarding Biological Resources.

3.3.2 Coastal Resources

The Florida Department of Environmental Protection Office of Resilience and Coastal Protection considers all of Florida as part of the state's coastal zone. The closest USFWS Coastal Barrier Resources (CBRS) unit is Cockroach Bay (FL-83), located approximately 18 miles south of the Direct Study Area (U.S. Fish and Wildlife Service, 2022). The Proposed Project is located near two FDEP Office of Resilience and Coastal Protection managed areas. Boca Ciega Bay is located approximately 20 miles southwest of the Direct Study Area, and Cockroach Bay is approximately 18 miles south of the Direct Study Area (FDEP Office of Resilience and Coastal Protection, 2021). The Proposed Project would not affect coastal resources, create plans to direct future agency actions, or propose rulemaking that alters uses of a coastal zone that are inconsistent with the Coastal Management Program.

3.3.3 Children's Environmental Health and Safety Risks

Construction and operation of the Proposed Project would occur entirely on Airport property and would not require the relocation of residents. The closest schools are Pierce Middle School and Alexander Elementary School, located approximately 1.70 miles northeast of the Direct Study Area. ***Figure 3-4*** shows the location of Pierce Middle School and Alexander Elementary School in relation to the Direct Study Area.

Since all construction activities would occur on Airport property, the Proposed Project would not directly affect surrounding communities.

An Area Equivalent Method (AEM) noise analysis was conducted for this EA (see ***Section 3.4.6*** of this EA). Compared to the No Action Alternative, the Proposed Project's potential change in the DNL 65 dBA contour is 0.6% in 2032 (or approximately 19 acres of a total 2,336-acre contour). According to FAA Order 1050.1F Desk Reference, "If the AEM calculations indicate that the action would result in less than a 17 percent (approximately a DNL 1 dB) increase in the DNL 65 dB contour area, there would be no significant impact over noise sensitive areas, and no further noise analysis would be required" (Federal Aviation Administration, 2020). Therefore, the Proposed Project would not indirectly affect these schools.

Due to the distance to the two closest schools, the Proposed Project would not increase the exposure of environmental contaminants to children in the surrounding community. Therefore, the Proposed Project would not affect children's environmental health and safety risks.

3.3.4 Environmental Justice

Construction and operation of the Proposed Project would occur entirely on Airport property for aeronautical use and would not require relocating residents or businesses. No minority and/or low-income populations are in or near the Direct Study Area. The closest minority-populated area is located approximately one mile to the east of the Direct Study Area within the Indirect Study Area (EPA, 2022). However, the minority-populated area within the Indirect Study Area primarily comprises commercial development land use. The closest low-income area is approximately one-mile northeast of the Direct Study Area (EPA, 2022). There would be no direct impacts on the surrounding community as the Proposed Project would occur entirely on Airport property.

As described in ***Section 3.4.1***, the construction and operation of the Proposed Project would not significantly affect air quality or violate local, state, tribal, or federal air quality standards under the Clean Air Act Amendments of 1990 nor indirectly affect minority and/or low-income populations.

An AEM noise analysis was conducted for this EA (see ***Section 3.4.6*** of this EA). Compared to the No Action Alternative, the Proposed Project's potential change in noise in the DNL 65 dBA contour is 0.6% in 2032. According to FAA Order 1050.1F Desk Reference, "If the AEM

calculations indicate that the action would result in less than a 17 percent (approximately a DNL 1 dB) increase in the DNL 65 dB contour area, there would be no significant impact over noise sensitive areas, and no further noise analysis would be required" (Federal Aviation Administration, 2020). Therefore, there would be no indirect impacts on Environmental Justice communities.

3.3.5 Farmlands

According to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), soil types within and near the Direct Study Area are not classified as prime or unique farmland or farmland of statewide importance (see ***Appendix E***). This area is not used to cultivate crops (NRCS, 2022). The Proposed Project would not affect prime, unique, or state-significant farmland.

3.3.6 Land Use

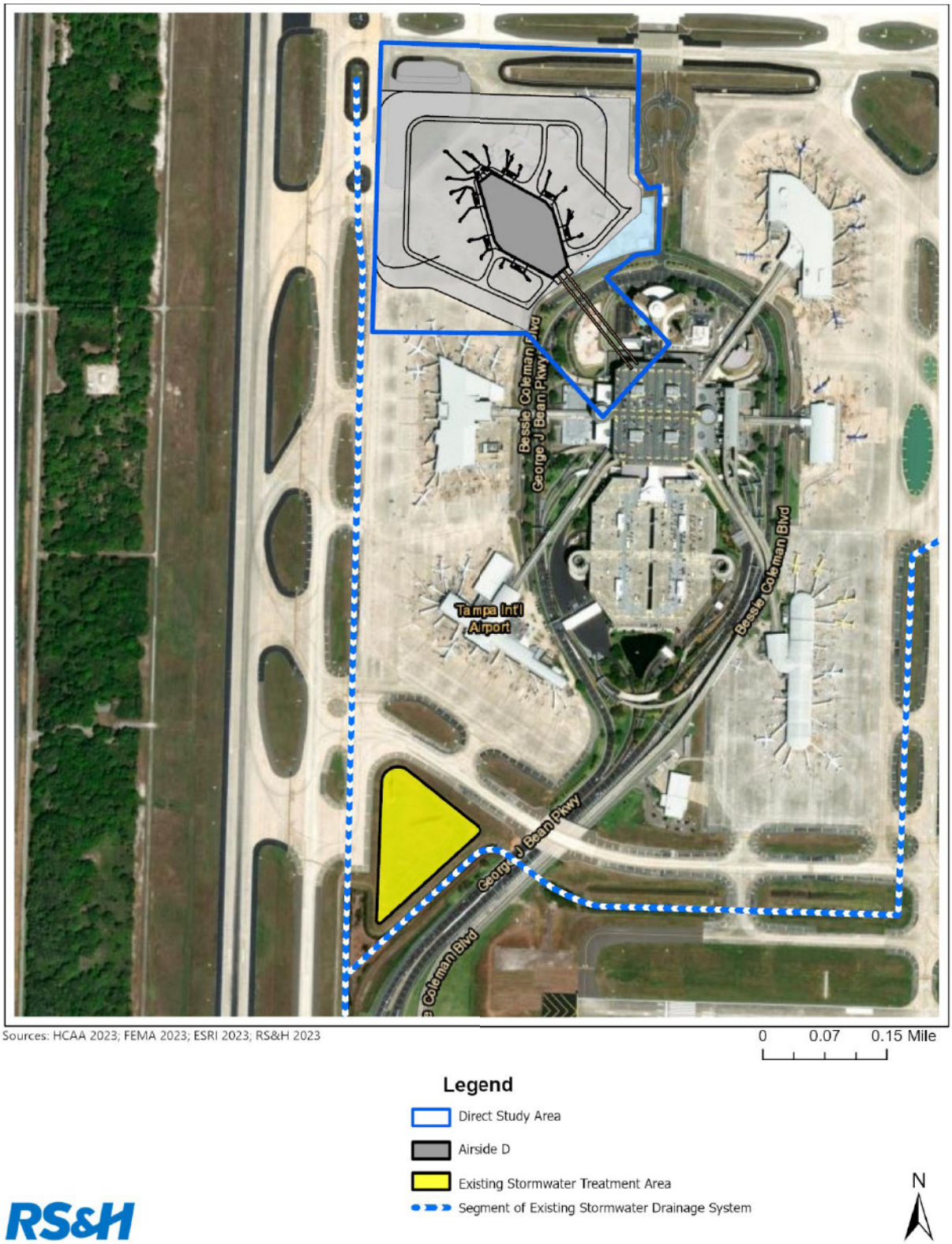
According to the City of Tampa, existing land use in the Direct Study Area is classified as an Airport Compatibility District (City of Tampa, 2022). The Proposed Project's construction would occur entirely on Airport property and would be compatible with the existing Airport environment. The Proposed Project would be consistent with future plans. It would not cause any incompatibilities or inconsistencies with local land use plans. In addition, the Proposed Project would not create a new wildlife attractant or create an obstruction to navigation airspace per 14 CFR Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace.* The Proposed Project would not significantly affect other resources that could indirectly affect land use (e.g., the Proposed Project would not disrupt communities, affect DOT Section 4(f) resources, etc.). Therefore, no significant land use impacts would occur with the implementation of the Proposed Project.

3.3.7 Water Resources

Wetlands – According to the Airport's Stormwater Master Plan, no wetlands are in the Direct Study Area. In 2023, a field check was conducted to determine the presence of wetlands. No wetlands exist in the Direct Study Area. Therefore, the Proposed Project would not affect wetlands.

Surface Water and Groundwater – Most of the Direct Study Area is paved with concrete, and rainfall runoff is treated in the Airport's existing stormwater system. The Proposed Project would add about 4.25 acres of new pavement for additional apron and taxilane use affecting an existing permitted stormwater pond (permit no. 49008387-037). Based on the SWFWMD permit criteria for water quality treatment, the existing downstream permitted pond (see ***Figure 3-4***) was designed with the capacity to accommodate and treat the additional runoff (less than 0.375 acre/feet). Therefore, the existing stormwater system would treat rainfall-runoff of the additional impervious surface, and the Proposed Project would not result in surface water impacts.

Figure 3-4: Segment of Existing Stormwater System

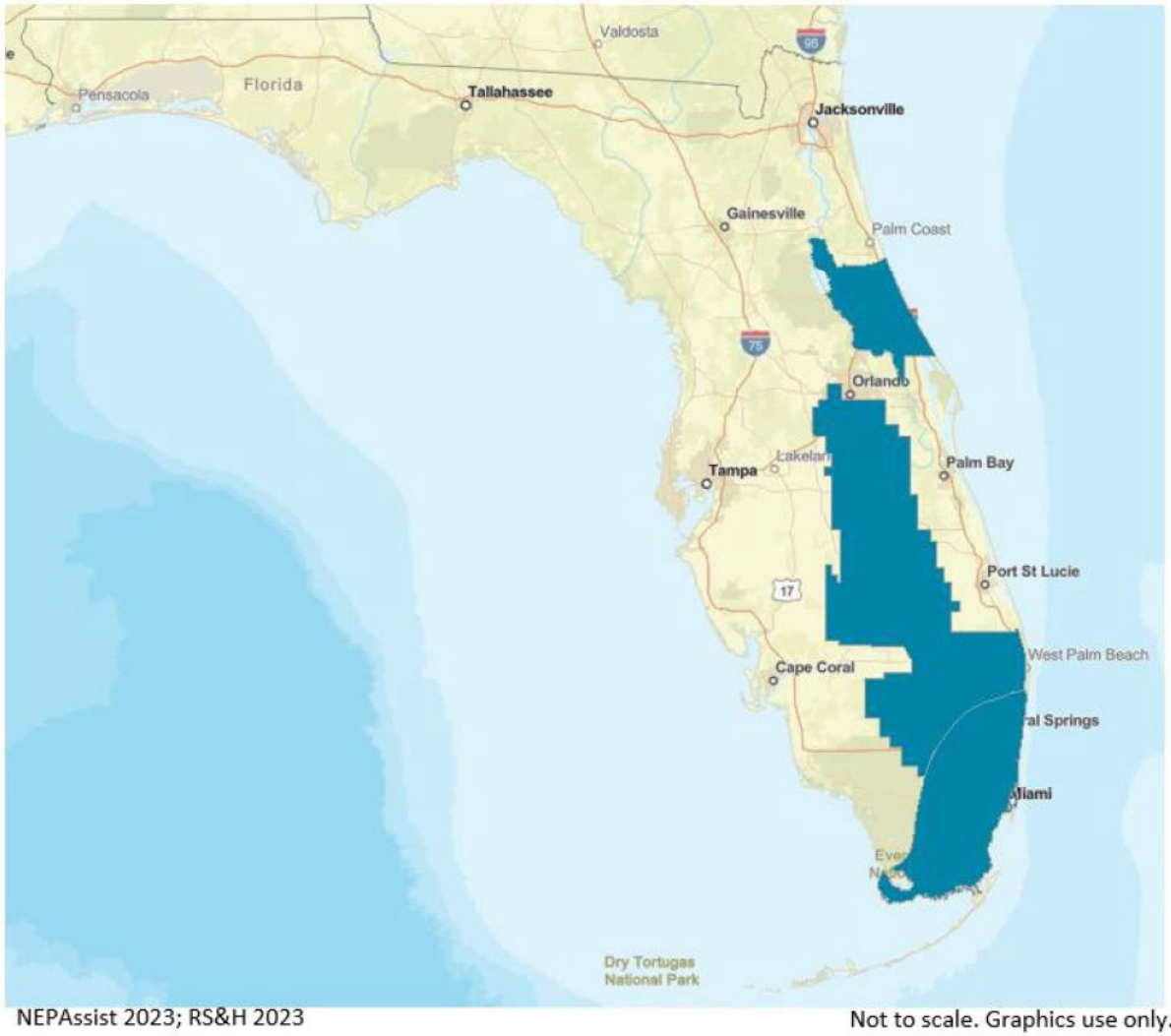


The Airport is located within the Floridian aquifer system (Crandall, 2007). The Floridian aquifer consists of connected carbonate rock that spans multiple southern states (Crandall, 2007). The portion of the Floridian aquifer in the Tampa region consists of sand, clay, and limestone, which make up the surficial deposits within the Floridian aquifer system (Crandall, 2007). The Bedrock is thick carbonate from 650 feet to 1,300 feet below ground level (Crandall, 2007). While engineering plans have not been finalized, construction of the Proposed Project's support system is estimated to be constructed to depths 30-50 feet below ground level and would not affect the aquifer.

The Proposed Project would not be located in a sole source aquifer (SSA) as the closest SSA is the Biscayne Aquifer, located approximately 65 miles east of the Direct Study Area (see ***Figure 3-5***) (EPA, 2022). The Proposed Project would be designed and permitted to meet water quality standards. Since there is no SSA in the area and construction of the Proposed Project would have no physical interaction with the Floridian aquifer due to its depth, there would be no contamination of the public water supply. Also, the SWPPP plan and BMPs/other pollution control measures would be implemented during and after construction. Therefore, the Proposed Project would not exceed federal, state, local, or tribal water quality standards. It would not contaminate an aquifer used for public water supply.

Wild and Scenic Rivers – The closest Wild and Scenic River is the Wekiva River, located approximately 94 miles to the northeast (National Wild and Scenic Rivers System, 2022). The closest Nationwide Rivers Inventory (NRI) river segment is the Hillsborough River, located approximately 11 miles northeast of the Direct Study Area (National Park Service, 2022). Construction and operation of the Proposed Project would not affect any Wild and Scenic River segments or NRI river segments.

Figure 3-5: Sole Source Aquifers



3.4 RESOURCES POTENTIALLY AFFECTED

The environmental resource categories that are potentially affected and analyzed are:

- Air Quality / Climate (***Section 3.4.1***)
- Department of Transportation Act, Section 4(f) (***Section 3.4.2***)
- Hazardous Materials, Solid Waste and Pollution Prevention (***Section 3.4.3***)
- Historic, Architectural, Archaeological, and Cultural Resources (***Section 3.4.4***)
- Natural Resources and Energy Supply (***Section 3.4.5***)
- Noise and Noise – Compatible Land Use (***Section 3.4.6***)
- Socioeconomics (***Section 3.4.7***)
- Visual Effects (***Section 3.4.8***)
- Water Resources (Floodplains) (***Section 3.4.9***)

3.4.1 Air Quality / Climate

The sections below describe the existing conditions, significance threshold(s) pertaining to air quality and climate, and the potential air quality and climate effects of the Proposed Project compared to the No Action Alternative.

3.4.1.1 Affected Environment

Air Quality – The United States Environmental Protection Agency (USEPA) sets National Ambient Air Quality Standards (NAAQS) to protect public health and environmental welfare. The USEPA has identified the following six criteria air pollutants for which NAAQS are applicable: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO2), ozone (O3), particulate matter (PM10 and PM2.5), and sulfur dioxide (SO2). USEPA calls these pollutants "criteria" air pollutants because it regulates them by developing human health-based and/or environmentally-based criteria (science-based guidelines) for setting permissible levels (USEPA, 2022).

The USEPA has three classifications for areas regarding their ability or inability to meet the NAAQS. "Nonattainment" areas are geographic areas that violate one or more NAAQS. "Attainment" areas are geographic areas where concentrations of the criteria pollutants are below (i.e., within) the NAAQS. Lastly, "maintenance" areas are geographic areas with prior nonattainment status that have since transitioned to attainment.

The Direct Study Area is located entirely within Hillsborough County. The Direct Study Area is an "attainment" area for all National Ambient Air Quality Standards (NAAQS) (EPA Greenbook, 2022).[12]

[12] NAAQS are six criteria pollutants: carbon monoxide, lead, ozone, sulfur dioxide, nitrogen dioxide, and ozone.

According to the USEPA, lead (2008 standard) for a portion of the County is classified as "maintenance" (i.e., about 10 miles east of the Airport) (EPA, 2022). Also, sulfur dioxide 1-hour (2010 standard) for a portion of the County is classified as "maintenance" (i.e., Gibsonton and Riverview areas, over 10 miles southeast of the Airport) (EPA, 2022).

Climate - Greenhouse gases (GHG) trap heat in the earth's atmosphere. Naturally occurring and man-made GHGs include water vapor, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Activities that require fuel or power are the primary stationary sources of GHGs at airports. Aircraft and ground access vehicles, which are not under the control of an airport, typically generate more GHG emissions than airport-controlled sources.

Research has shown a direct correlation between fuel combustion and greenhouse gas emissions. In terms of U.S. contributions, the U.S. Government Accountability Office (GAO) reports that "domestic aviation contributes about three percent of total carbon dioxide (CO_2) emissions, according to USEPA data," compared with other industrial sources, including the remainder of the transportation sector (20 percent) and power generation (41 percent) (GAO, 2009) The International Civil Aviation Organization (ICAO) estimates that GHG emissions from aircraft account for roughly three percent of all anthropogenic GHG emissions globally (Melrose, 2010) Climate change due to GHG emissions is a global phenomenon. Hence, the affected environment is the global climate (USEPA, 2009).

The scientific community is continuing efforts to understand the impact of aviation emissions on the global atmosphere. The FAA is leading and participating in several efforts to clarify commercial aviation's role in GHG emissions and climate. The FAA, with support from the U.S. Global Change Research Program and its participating federal agencies (e.g., National Aeronautics and Space Administration, National Oceanic and Atmospheric Administration, USEPA, and U.S. Department of Energy), has developed the Aviation Climate Change Research Initiative to advance scientific understanding of regional and global climate impacts from aircraft emissions. The FAA also funds the Partnership for Air Transportation Noise & Emissions Reduction Center of Excellence research initiative to quantify the effects of aircraft exhaust and contrails on global and U.S. climate and atmospheric composition. ICAO is examining similar research topics at the international level (Maurice & Lee, 2007).

Carbon dioxide is the primary GHG emitted by human activity, making up about 80% of all GHG emissions. Greenhouse gas emissions are often measured in carbon dioxide equivalent (CO_{2e}). In 2020, the GHG emissions for the U.S. were 5,981 million metric tons (MMT)[13] of CO2e, and the State of Florida was 262 MMT of O_{2e} (EPA, 2022).

[13] According to the USEPA, a million metric tons is equal to about 2.2 billion pounds (EPA, 2022).

3.4.1.2 Environmental Consequences

Significance Threshold

Air Quality - FAA Order 1050.1F, Exhibit 4-1, provides the FAA's significance threshold for air quality, which states, "The action would cause pollutant concentrations to exceed one or more of the NAAQS, as established by the USEPA under the Clean Air Act, for any of the time periods analyzed, or to increase the frequency or severity of any such existing violations."

Climate – According to FAA 1050.1F, Desk Reference, "There are no significance thresholds for aviation or commercial space launch GHG emissions, nor has the FAA identified specific factors to consider in making a significance determination for GHG emissions. There are currently no accepted methods of determining significance applicable to aviation or commercial space launch projects given the small percentage of emissions they contribute." While FAA 1050.1F Desk Reference does not provide a significance threshold for aviation-related GHG emissions, the projected increase in GHG emissions from the Proposed Project is discussed in the context of the State of Florida and national GHG emissions from all sources.

In January 2023, CEQ provided interim guidance to assist agencies in analyzing GHG and climate change effects for proposed actions under NEPA (CEQ, 2023). However, the FAA does not have any guidance or descriptions of significance threshold for this topic at the time of this EA.

Potential Impacts

Air Quality – Construction of the Proposed Project would cause a minor increase in surface vehicles using area roadways to access the construction site. However, this would be temporary, lasting the duration of construction. A Construction Emissions Inventory (CEI) of the Proposed Project was conducted through the USEPA's MOVES3 program. The CEI was evaluated using the estimated duration of construction, the Proposed Project dimensions, and the model's assumption of construction vehicles and equipment across that time frame.

Table 3-2 shows the construction emissions inventory results and greenhouse gas (GHG) emissions. As mentioned above, the Direct Study Area is in attainment for all NAAQS emissions categories; therefore, the CEI results would not need to be within the EPA *de minimis* threshold rates for projects within maintenance and non-attainment areas. The CEI results concluded that no NAAQS emissions category would approach or surpass any *de minimis* threshold. See ***Appendix A*** for detailed CEI results.

When compared to the No Action Alternative, the Proposed Project would result in an increase in aircraft operations in 2027 and 2032. As the 2032 study year has the larger increase in aircraft operations (i.e., 2,000), the aircraft emissions due to the 2032 Proposed Project were compared to the Hillsborough County total emissions. As previously described, the Direct Study Area is in "attainment" for all NAAQS. Therefore, air quality *de minimis* thresholds do not apply.

Table 3-2: Construction Emission Inventory (tons)

	CO	VOC	NOx	SOx	PM2.5	PM10
No Action Alternative	1,581.45	207.31	1,766.42	145.01	18.65	18.72
Proposed Project	1,590.39	208.42	1,776.07	145.88	18.78	18.85
Difference	8.94	1.11	9.65	0.87	0.13	0.13
Hillsborough County Total	149,296	46,505	24,761	8,244	6,911	26,365
Percent of County Total	0.006%	0.002%	0.039%	0.011%	0.002%	0.001%

Source: MOVES3.1, RS&H, 2023.

However, for informational purposes, ***Table 3-3****Error! Reference source not found.* shows the 2032 Proposed Project's aircraft emissions compared to the total emissions by criteria pollutant reported for Hillsborough County.[14] The Proposed Project would not significantly affect air quality or violate local, state, tribal, or federal air quality standards under the Clean Air Act Amendments of 1990.

Table 3-3: 2032 Annual Aircraft Emissions (tons per year)[1]

	NAAQS						GHGs		
2025-2026	**CO**	**VOC**	**NOx**	**PM_{10}**	**$PM_{2.5}$**	**SOx**	**CO_2**	**CH_4**	**N_2O**
NONROAD[2]	4.24	0.60	16.69	0.67	0.65	0.03	12,431.19	0.00	0.00
ONROAD[3]	13.71	0.10	0.36	0.01	0.01	0.01	1,025.47	0.03	0.00
FUGITIVE[4]	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00
TOTAL (TPY)	17.95	0.70	17.05	0.68	0.67	0.04	13,456.66	0.03	0.00
HILLSBOROUGH COUNTY TOTAL	149,296	46,505	24,761	26,365	6,911	8,244	N/A	N/A	N/A
% OF COUNTY	0.012%	0.001%	0.068%	0.025%	0.009%	0.0005%	N/A	N/A	N/A

Notes: 1 - Aircraft operation emissions were calculated up to the 3,000-foot mixing height. 2 – Nonroad: Emissions from construction equipment (e.g., bulldozer); 3 – Onroad: Emissions from cars, trucks, and buses; 4 – Fugitive: Emissions of particulate matter from vehicles driving over paved roads.
Source: 2017 EPA National Emissions Report; https://gispub.epa.gov/neireport/2017/; RS&H, AEDT, 2023.

It is important to note that this aircraft emissions analysis does not include a potential future decrease in emissions due to technological advancements or regulations.

Climate - GHG emissions would occur during the construction and operation of the Proposed Project. Using fossil fuel-powered machinery during the construction of the Proposed Project would emit GHGs such as CO2. These emissions would only last as long as construction

[14] Hillsborough County data for 2017 is the most recent data included in EPA's National Emissions Inventory.

activities. When compared with the 2027 No Action Alternative, the 2027 Proposed Project would increase passengers traveling to and from the Airport by 43 average daily trips. In 2032, the Proposed Project would increase the average daily trips to 186 per day greater than the 2032 No Action Alternative. As a result, the increase in average daily trips would increase vehicle-related GHG emissions in the Direct Study Area.[15] Most passengers live in the Tampa Bay area. According to the HCAA, 77.3% of local passengers reside in Hillsborough, Pinellas, and Pasco counties (HCAA, 2023). Also, according to the HCAA, approximately 93% of the Airport employees reside in zip codes in these same three counties (HCAA, 2023). Therefore, the vehicle-related GHG emissions in the area would not significantly change for the region.

In addition, the Proposed Project would increase the number of aircraft operating at the Airport. However, the Proposed Project's aircraft operations emissions would not significantly affect GHG emissions for the State of Florida or the U.S. (see ***Appendix A*** for further details).

With the Proposed Project, total energy use would increase. An HCAA goal is to reduce energy use intensity (EUI), or the energy used per square foot, in these spaces by 10% relative to the HCAA's 2018 baseline. Recent energy efficiency efforts have reduced EUI by 2%. HCAA's focus on energy efficiency is essential for sustainable development at the Airport. It is the most cost-effective method for reducing greenhouse gas emissions (HCAA, 2023). The HCAA has implemented various sustainability initiatives at the Airport. The 2024 Sustainability Master Plan (SMP) sets the direction for the next ten years of sustainable and resilient development for the HCAA airports, including the Airport. The HCAA has installed 176,000 square feet of solar arrays and various LED fixtures in the terminal and airfield to lower electricity usage (Tampa International Airport, 2023). Water use at the Airport has been reduced with reclaimed water for irrigation and cooling towers as needed (Tampa International Airport, 2023). Additionally, the Airport uses rainwater harvesting and low-impact landscape maintenance to lower water demands (Tampa International Airport, 2022). Therefore, following the 2024 SMP and existing energy-saving infrastructure at the Airport, GHG emissions are expected to be reduced.

Social Costs of Greenhouse Gases (SC-GHGs)

In January 2023, the Council on Environmental Quality (CEQ) issued interim guidance, *National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change*, to assist agencies in analyzing greenhouse gas emissions (GHG) and climate change effects of a proposed project under NEPA. The CEQ identified Social Cost-Greenhouse Gases (SC-GHG) as the metric for assessing potential climate impacts and represents the monetary

[15] According to the TPA MPU, the 2022 average daily trips for George Bean Parkway was 17,400.

These totals do not include employee or tenants. Since they are a fraction of the number of passengers, a 5% increase in trips is disclosed (2027 Proposed Project including employees and tenants would be 45 additional trips and the 2032 Proposed Project would be 195 additional trips including employees and tenants).

estimate of the effect associated with each additional metric ton of carbon dioxide released into the air (Interagency Working Group, 2021).

To calculate SC-GHG, the carbon dioxide equivalent CO_2e[16] must be calculated first. CO_2e is calculated using the Global Warming Potential (GWP) metric to compare a gas's impact on the global climate concerning CO_2. GWP values are based on the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) (IPCC, 2023).

The Interagency Working Group (IWG) developed average discount rates to assess possible climate impacts over time. The higher the discount rate, the lower the social climate cost (SCC) for future generations. Three climate models were used to develop discount rates that were based on the results from three economic models used by the IWG: William Nordhaus' DICE model (Yale University), Richard Tol's FUND model (Sussex University), and Chris Hope's PAGE model (Cambridge University) (Interagency Working Group, 2021). The IWG average discount rates are 5 percent, 3 percent, and 2.5 percent, and the 95th percentile estimate at the 3 percent discount rate represents the potential for low-probability catastrophic climate impacts. The IWG average discount rates represent a range of possible climate impacts to future generations. For example, the 5 percent average rate represents a situation where future generations are best suited to handle potential climate impacts from the Proposed Project, leading to a minimal social cost impact. The IWG determined the social cost of CO_2 (SC-CO_2) through 2050 and assigned a monetary value[17] for each additional metric ton of CO_2 produced. SC-CO_2 is equivalent to SC-GHGs and represents the social costs of the total greenhouse gases converted to the CO_2e equivalent. The SC-CO_2 helps weigh the benefits of climate mitigation against its costs.

The calculated social costs are estimates only and subject to change depending on various factors (i.e., flooding, energy supply). [18] ***Table 3-4*** calculations are for information purposes only and represent the potential social costs from construction emissions in years 2025 and 2026 and operational emissions in years 2027 and 2032. The social cost calculations represent a range of possibilities and are not guaranteed to occur. Advances in technology and operational practices could lead to lower social impacts than disclosed. This range represents the potential social costs of adding GHGs to the global atmosphere in a given year (Interagency Working Group, 2021). The range of potential social costs for 2025 from construction emissions is approximately $78,000 – $780,000; for 2026, the potential social cost is approximately $150,000 – $1,500,000. For operational emissions in 2027, the potential social cost ranges from $16,000 – $157,000; for 2032, the potential social cost ranges from $81,000 - $750,000. It is

[16] CO_2e: Number of metric tons of CO2 emissions with the same global warming potential as one metric ton of another greenhouse gas.

[17] These monetary values are based on the results from three economic models used by the IWG: William Nordhaus' DICE model (Yale University), Richard Tol's FUND model (Sussex University), and Chris Hope's PAGE model (Cambridge University).

[18] https://costofcarbon.org/files/Omitted_Damages_Whats_Missing_From_the_Social_Cost_of_Carbon.pdf; Accessed November 2023

important to note that this climate analysis does not include positive impacts from the Proposed Project (e.g., economic development, meeting projected passenger and airline (domestic and international) demand, proactively preventing near-future congestion, improving passenger experience, and technological advancements).

According to CEQ National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change (2023), "This guidance does not establish any particular quantity of GHG emissions as "significantly" affecting the quality of the human environment." According to 1050.1F Desk Reference, there are no significance thresholds for aviation GHG emissions, nor has the FAA identified specific factors to consider in making a significance determination for GHG emissions. There are currently no accepted methods of determining significance applicable to aviation projects given the small percentage of emissions they contribute. The Proposed Project, compared to the No Action Alternative, is not anticipated to significantly affect regional or global GHG emissions. There is a considerable amount of ongoing scientific research to improve understanding of global climate change and FAA guidance will evolve as the science matures or if new Federal requirements are established.

Table 3-4: **Social Cost - Carbon Dioxide for the Proposed Project**

Year	Proposed Project CO_2e	Average Estimate at 5% Discount Rate	Average Estimate at 3% Discount Rate	Average Estimate at 2.5% Discount Rate	95th Percentile Estimate at 3.0% Discount Rate
		Construction	Emissions		
2025	4,612.09	$78,405.53	$258,277.04	$382,803.47	$779,443.21
2026	8,844.57	$150,390.16	$504,249.36	$743,104.32	$1,530,441.04
		Operational	Emissions		
2027	889.8	$16,016.40	$52,498.20	$76,522.80	$156,604.80
2032	3,856.67	$80,990.07	$246,826.88	$354,813.64	$748,193.98

Note: Per the 2023 IPCC Sixth Assessment Report, CO_2e equivalent for SC-GHG were calculated using the Interagency Working Group[19] average discount rates: 5 percent, 3 percent, 2.5 percent, and the 95th percentile estimate applying the 3 percent discount rate. CO_2e Values are multiplied by the discount rate to calculate SC-CO_2.
Per the 2023 IPCC[20] Sixth Assessment Report, the CO_2 equivalent for N_2O is calculated by multiplying the N_2O emissions by the GWP of 265. The CO_2 equivalent for CH_4 is calculated by multiplying the CH_4 emissions by the GWP of 28. For example, the 2025 Average Estimate at 5% Discount Rate was calculated using the 2025 CO_2e value of 6,737.994 multiplied by 2025's $17 determined value for the 5% Discount Rate. Sources: Interagency Working Group, 2021, IPCC Sixth Assessment 2023, RS&H, 2023.

[19] Technical Support Document: Social Cost of Carbon, Methane, (whitehouse.gov); Accessed November 2023

[20] https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_LongerReport.pdf; Accessed November 2023

Mitigation Measures

As described above, the Proposed Project would not result in significant air quality or climate effects. Therefore, the HCAA does not propose mitigation measures for the Proposed Project.

However, according to the HCAA 2024 Sustainable Management Plan, while airports lack direct control over airline operations emissions, the HCAA's reduction in emissions is being achieved and facilitated through activities that reduce the Airport's effect on climate change and its contribution to net-zero GHG emissions by 2050. HCAA is currently on track to meet this goal.

In addition, the HCAA participates in the Airport Carbon Accreditation (ACA) Program. This voluntary certification program allows airports of any size to demonstrate their commitment to greenhouse gas reduction. ACA has six levels of accreditation including: (1) Mapping, (2) Reduction, (3) Optimization, (3+) Neutrality, (4) Transformation, and (4+) Transition. Tampa International Airport has reached the Level 2 standard. Continued participation at Level 2 or higher would support the reduction of annual emissions at the Airport.[21]

3.4.2 Department of Transportation Act, Section 4(f) and Section 6(f) Resources

Department of Transportation (DOT) Act, Section 4(f) protects significant publicly owned parks, recreational areas, wildlife and waterfowl refuges, and public and private historic sites. This section describes the existing conditions and significance threshold(s) pertaining to DOT Section 4(f) resources and Section 6(f) Land and Water Conservation Fund (LWCF) resources. This section also describes the potential effects of the Proposed Project compared to the No Action Alternative.

3.4.2.1 Affected Environment

One DOT Section 4(f) resource exists, the Tampa International Airport Main Terminal, within the Direct Study Area. As described in ***Section 3.4.4***, according to the Florida Master Site File, the Tampa International Airport (Site ID HI14544) is eligible for listing on the National Register of Historic Places (NRHP) (SHPO, 2022). Therefore, it is also a Section 4(f) resource. Four additional Section 4(f) resources are near the Airport and Direct Study Area. Rocky Point Golf Course is approximately one mile west of the Direct Study Area. Al Lopez Park is approximately two miles to the northeast. Loretta Ingraham Park is approximately two miles to the southeast. Lincoln Garden Park is approximately two miles southeast of the Direct Study Area (City of Tampa, 2022) (see ***Figure 3-6***). There are no recreational or wildlife refuges or LWCF Section 6(f) resources in the Direct Study Area.

[21] https://www.tampaairport.com/our-sustainability-program

Figure 3-6: Section 4(f) Resources

3.4.2.2 Environmental Consequences

Significance Threshold

FAA Order 1050.1F, Exhibit 4-1, provides the FAA's significance threshold for Section 4(f), which states, "The action involves more than a minimal physical use of a Section 4(f) resource or constitutes a "constructive use" based on an FAA determination that the aviation project would substantially impair the Section 4(f) resource." For Section 4(f) purposes, a project would "use" a resource in one of two ways.

Physical Use: The project physically occupies and directly uses the Section 4(f) resource. A project's occupancy or direct control (via purchase) causes a change in the use of the Section 4(f) resource. For example, building a runway safety area across a fairway of a publicly-owned golf course is a physical taking because the transportation facility physically used the course by eliminating the fairway.

Constructive Use: The project indirectly uses a Section 4(f) resource by substantially impairing the resource's intended use, features, or attributes. For example, a constructive use of an overnight camping area would occur when project-related aircraft noise eliminates the camping area's solitude. Although not physically occupying the area, the project indirectly uses the area by substantially impairing the features and attributes (i.e., solitude) that are necessary for the area to be used as an overnight camping area.

Potential Impacts

The Proposed Project is to construct aviation-related infrastructure at the Airport and replace an airside and 450-foot-long-dual-guideway APM connection that were previously operational (1971-2005) and later demolished (2007). The APM would connect the proposed Airside D to the Main Terminal (a Section 4(f) resource and historic resource eligible for listing on the NRHP) (see ***Section 3.4.4*** for further details regarding the historic resource). As the project is the re-establishment of an airport facility in line with the resources activities, attributes, and features, and it does not change the use of the resource, it does not constitute a "use" under 4(f). Additionally, the State Historic Preservation Officer (SHPO) concurred that the project would have no adverse effect on the resource. See ***Appendix F*** for more information.

The described Section 4(f) resources are not within the existing DNL 65 dBA noise contour. An Area Equivalent Method (AEM) noise analysis was conducted for this EA (see ***Section 3.4.6*** of this EA). Compared to the No Action Alternative, the Proposed Project's potential change in the DNL 65 dBA contour is 0.6% in 2032 (or approximately 19 acres of a total 2,336-acre contour). Therefore, the Proposed Project would not be an appreciable change in the aircraft noise environment and would not indirectly affect (i.e., constructive use) these Section 4(f) resources.

Mitigation Measures

Because the Proposed Project would not exceed the FAA's significance threshold for Section 4(f) or Section 6(f) resources, the HCAA does not propose mitigation measures.

3.4.3 Hazardous Materials, Solid Waste, and Pollution Prevention

This section describes the existing conditions and significance threshold(s) pertaining to hazardous materials, solid waste, and pollution prevention. This section also describes the potential effects of the Proposed Project compared to the No Action Alternative.

3.4.3.1 Affected Environment

According to FAA 1050.1F Desk Reference, "*hazardous material is any substance or material that has been determined to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce*" and includes hazardous wastes and hazardous substances. According to the Resource Conservation and Recovery Act (RCRA), solid waste includes construction and demolition debris, food waste from concession activities in the terminal, and paper/cardboard. Pollution prevention includes methods to avoid, prevent, or reduce pollutant discharges or emissions as a result of a project.

Hazardous Materials – According to the USEPA, no designated hazardous material sites exist in the Direct Study Area (EPA, 2022). One aboveground ground service equipment (GSE) fuel tank is near the former Airside D terminal. However, the fuel tank has no pollution or hazardous conditions and would be relocated before construction. In 2007, the fueling system components servicing Airside D were taken out of service. The fuel lines were cleaned, grouted, and abandoned in-place. Valve boxes and hydrant pits were removed except for the two isolation valve boxes located along the edge of the apron, which remain. The concrete apron was restored in all areas affected by the demolition. According to the HCAA, there is the potential for legacy residual underground petroleum products in the Direct Study Area. The HCAA would require the Proposed Project's design-builder to investigate the existing conditions during the design phase. Soil analyses may be required by a selected disposal facility, which would be completed before the initiation of construction. The selected design-builder would submit a construction proposal for what is required to construct the Proposed Project in accordance with all applicable environmental regulations and code requirements.

Solid Waste and Pollution Prevention – The HCAA tracks waste and recycling data for TPA. In 2021 (the most recent data readily available), TPA produced 4,442 tons of waste, of which 1,024 tons were recycled, for a diversion rate of 23%. In 2021, the Airport had 15.4 million annual passengers; therefore, on average, the pounds of undiverted waste (i.e., waste disposed after recycling or 3,398 tons) would be approximately 0.44 pound per passenger.

A significant amount of the Airport's municipal solid waste is sent to the McKay Bay Waste-to-Energy (WTE) facility, which converts solid waste into electricity for the City of Tampa (Tampa International Airport, 2014). Waste that cannot be processed at the McKay Bay WTE facility is sent to the Hillsborough County Southeast Landfill, approximately 25 miles southeast of the Airport in Lithia, Florida (Tampa International Airport, 2014). In 2021, according to the Florida Department of Environmental Protection, the Southeast Landfill had approximately 6.5 million

cubic yards of volume remaining. This landfill's remaining capacity is through the year 2030 (SCS Engineers, 2021).

The HCAA has established various sustainability practices to reduce the environmental impact of the Airport. The Airport has developed a Sustainable Management Plan (SMP), which established environmental goals and created a continuous monitoring system to ensure the goals of the SMP are being achieved. The SMP has identified three focus areas: facility planning, design and construction, and maintenance and operations (Tampa International Airport, 2014). The sustainability initiatives involve the Airport's energy, water, waste management practices, and design. For energy use, the HCAA installed electric charging stations for public use, and the Airport's vehicle fleet consists of 42% alternative fuel vehicles (Tampa International Airport, 2023).

In 2009, the HCAA developed a collection and recycling program in the main terminal and airsides. There are 132 recycling containers placed throughout public areas of the Airport for passengers to recycle and 31 containers placed in employee break rooms. The Airport participates in the City of Tampa's recycling program, which allows for recycling plastics, glass, aluminum, steel cans, newspapers, magazines, and paperboard. The Authority's recently updated Sustainability Management Plan targets a 30% recycling rate by 2030.

The HCAA has implemented waste management programs to reduce the total waste produced at the Airport. The Airport has implemented recycling programs that led to a 27% recycling rate in 2017 (Tampa International Airport, 2023).

3.4.3.2 Environmental Consequences

Significance Threshold

FAA Order 1050.1F does not define a significance threshold for hazardous materials, solid waste, and pollution prevention; however, it does provide several factors to consider in evaluating the context and intensity of potential environmental impacts. FAA Order 1050.1F, Exhibit 4-1 states that these include when the action would have the potential to:

- "Violate applicable federal, state, tribal, or local laws or regulations regarding hazardous materials and/or solid waste management;
- Involve a contaminated site (including but not limited to a site listed on the National Priorities List). Contaminated sites may encompass relatively large areas. However, not all of the grounds within the boundaries of a contaminated site are contaminated, which leaves space for siting a facility on non-contaminated land within the boundaries of a contaminated site. An EIS is not necessarily required. Paragraph 6-2.3.a of [FAA Order 1050.1F] allows for mitigating impacts below significant levels (e.g., modifying an action to site it on non-contaminated grounds within a contaminated site). Therefore, if

appropriately mitigated, actions within the boundaries of a contaminated site would not have significant impacts;

- Produce an appreciably different quantity or type of hazardous waste;
- Generate an appreciably different quantity or type of solid waste or use a different method of collection or disposal and/or would exceed local capacity; or
- Adversely affect human health and the environment."

Potential Impacts

Hazardous Materials – Construction of the Proposed Project would involve using hazardous materials (such as fuels), subject to Best Management Practices (BMPs). The Proposed Project would not involve any properties on the National Priorities List. Operation of the Proposed Project would increase the Airport's use of operationally related hazardous materials (e.g., aviation fuel, oils, solvents, etc.). The HCAA maintains a Spill Prevention and Countermeasure Control Plan (SPCC) and a Stormwater Pollution Prevention Plan (SWPPP). In addition, major airlines that operate at the Airport maintain similar plans for the Airport's bulk fuel and fuel hydrant system. Therefore, the Proposed Project would not significantly affect designated hazardous material properties.

Solid Waste and Pollution Prevention - Construction of the Proposed Project would cause a short-term, temporary increase in the quantity of solid waste generated at the Airport; however, the amount of solid waste anticipated would not affect the capacity of landfills in the area. The selected contractor would be responsible for disposing of waste in accordance with all federal, state, and local rules and regulations. The oil used for the lubrication of construction equipment could be recycled in accordance with federal, state, and local laws.

The Proposed Project would increase the number of aircraft operations by 462 in 2027 and 2,000 in 2032. Compared to the No Action Alternative, the Proposed Project would increase airline waste by approximately 15.2 tons in 2027 and 66 tons in 2032.[22] These calculations do not take into consideration the HCAA's increasing recycling rate to 30% by 2030. Solid waste would continue to be handled and disposed of in accordance with federal, state, and local rules and regulations and would not significantly affect local landfills. Therefore, the Proposed Project would not significantly affect solid waste.

Mitigation Measures

Because the Proposed Project would not cause direct or indirect effects on hazardous materials, solid waste, and pollution prevention, the HCAA does not propose mitigation measures.

[22] Calculations were based on 150 passengers per operation (i.e., an approximate number of passengers on a narrow body aircraft).

3.4.4 Historic, Architectural, Archaeological, and Cultural Resources

This section describes the existing conditions and significance threshold(s) pertaining to historical, architectural, archaeological, and cultural resources. This section also describes the potential historic resources effects of the Proposed Project (referred to in this section as the proposed undertaking) compared to the No Action Alternative.

3.4.4.1 Affected Environment

The National Historic Preservation Act (NHPA)[23] establishes the Advisory Council on Historic Preservation (ACHP). The ACHP oversees federal agency compliance with the NHPA. The NHPA also established the NRHP, which the National Park Service (NPS) oversees. Section 106 of the NHPA established a process requiring federal agencies to consider the effects of a project on historic properties and to consult with the State Historic Preservation Officer regarding the proposed undertaking's effects.

The Area of Potential Effects (APE) to historic resources for the Proposed Undertaking consists of the Main Terminal, including existing Airsides A, B, C, E and F and the former Hardstand D area (see ***Figure 3-7***).

As shown in ***Figure 3-7***, the APE is approximately 480 acres and also includes portions of Runway 1L/19R and Runway 1R/19L, concrete apron area, vehicular roads (e.g., George Bean Parkway), taxiways, taxilanes, stormwater drainage system, and mowed/maintained airfield turf. The nearest NRHP-listed resource is the George Guida Sr. House, about 3.5 miles southeast of the APE (National Park Service, 2022).

According to the Florida Master Site File, the Tampa International Airport (Site ID HI14544) is within the APE and eligible for listing on the NRHP (SHPO, 2022). In 2018, Tampa International Airport (8HI14544) was determined eligible for inclusion in the NRHP due to its architectural style, integrity, and significant technological and design innovations (FMSF 2018). The significance is based on the National Register Criterion C, which represents "the distinct characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent significant and distinguishable entity whose components may lack individual distinction."

Five historic structures are recorded within one mile of the Proposed Project (see ***Table 3-5***).

These include one private residence (8HI09995) and four commercial buildings (8HI14469, 8HI14615, 8HI14627, and 8HI14628). Four of the five historical structures within one mile of the Proposed Project have been determined ineligible for inclusion in the NRHP, and one was not evaluated.

[23] 54 U.S.C. §§ 300101 et seq.

Figure 3-7: Area of Potential Effects (APE)

Sources: Google Earth, 2024; RS&H, 2024

N

Legend

Area of Potential Effects (APE)

RS&H

Table 3-5: Previously Recorded Historic Resources within One Mile of the Proposed Undertaking

Trinomial	Name	Site Type	Year Built	Type	NRHP Status
8HI14544	Tampa International Airport	Building Complex – American 20th Century	1971	Resource Group	Eligible (not determined)
8HI14628	Building 4, 5519 W. Hillsborough Ave.	Building – Commercial	1970	Historic Structure	Ineligible (2019)
8HI14627	Building 2, 5519 W. Hillsborough Ave.	Building – Commercial	1970	Historic Structure	Ineligible (2019)
8HI14615	Building 1, 5519 W. Hillsborough Ave.	Building – Commercial	1970	Historic Structure	Not evaluated
8HI09995	6011 Elanor Dr.	Building – Private Residence	1930	Historic Structure	Ineligible (2007)
8HI14469	6005 Jarvis Street	Building – Commercial	1961	Historic Structure	Ineligible (2019)
8HI03295	Hoover	Isolated Find – Native American-Aceramic	n/a	Archaeological Site	Not evaluated
8HI06719	Skyway Bike Trail	Campsite – Native American-Aceramic	n/a	Archaeological Site	Ineligible (2003)

Source: FMSF and SEARCH, Inc. 2023.

The one structure not evaluated was a commercial building (8HI14615) built in 1970 that is part of a complex of contemporary buildings located at 5519 W. Hillsborough Avenue.

Two archaeological sites are recorded within one mile of the Proposed Project (see ***Figure 3-8*** and ***Table 3-5***). These include one campsite site (8HI06719) and one site that is an isolated lithic find (8HI03295). See ***Appendix F*** for more information.

3.4.4.2 Environmental Consequences

Section 106 of the NHPA requires federal agencies to account for the effects of their undertaking[24] and consult with the SHPO, Tribal Historic Preservation Officers (THPO), and other parties to develop and evaluate alternatives or modifications to the undertaking where necessary to avoid, minimize, or mitigate adverse effects on historic properties. In consultation with the SHPO/THPO, the FAA evaluates a property's eligibility for inclusion in the NRHP.

Significance Threshold

FAA Order 1050.1F does not provide a significance threshold for historical, architectural, archeological, and cultural resources; however, it does provide a factor to consider in evaluating the context and intensity of potential environmental impacts. This would occur when the action results in a finding of Adverse Effect through the Section 106 process. However, an adverse effect finding does not automatically trigger the preparation of an EIS (i.e., a significant impact).

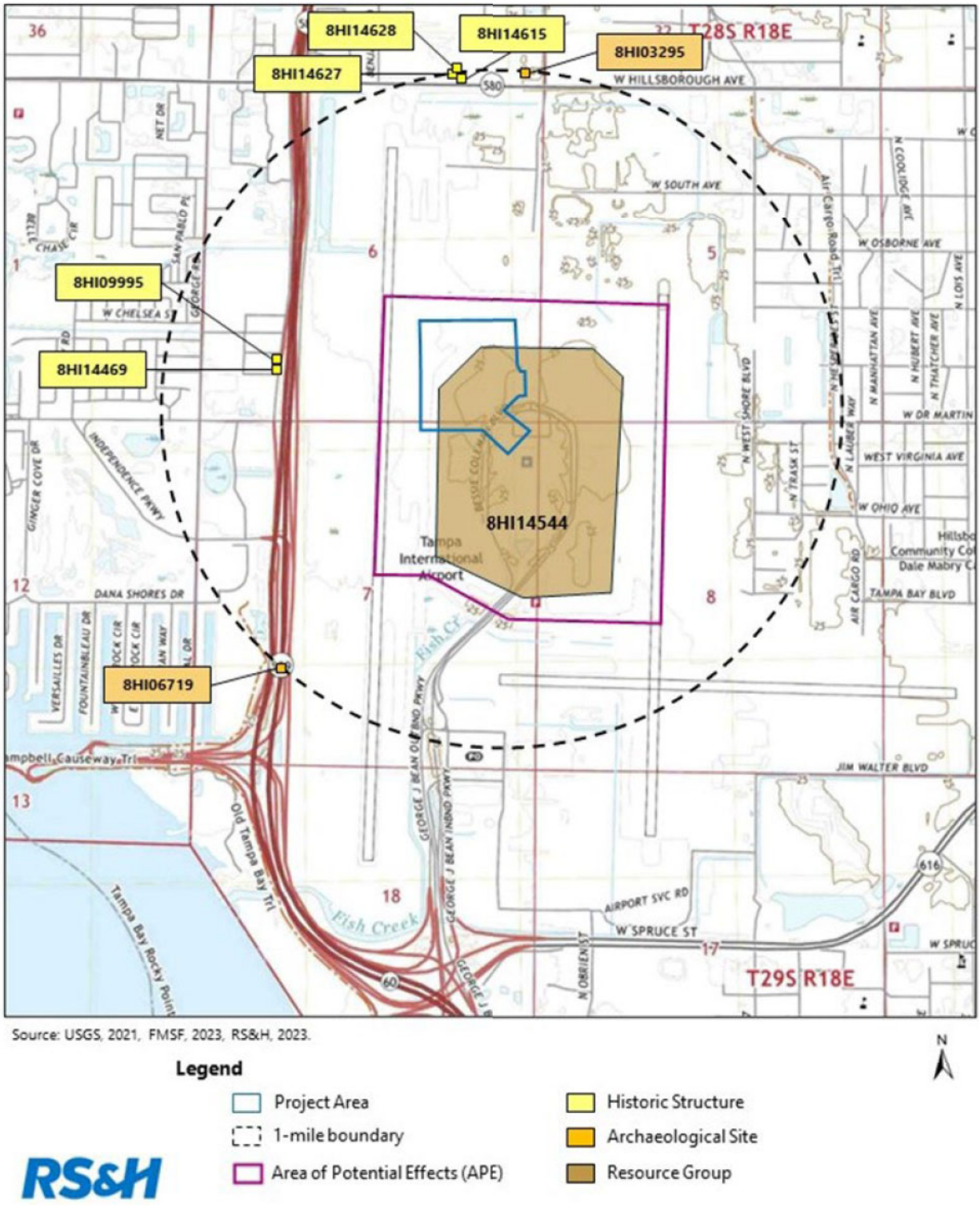
Potential Impacts

HCAA's Proposed Project is to construct aviation-related infrastructure at the Airport and replace an airside and 450-foot-long-dual-guideway APM connection that were previously operational (1971-2005) and later demolished (2007). The Proposed Project complements the architectural style and integrity of Site HI14544 and reestablishes significant technological and design innovations.

The Proposed Project would be consistent with the Airport setting. It would not affect National Register eligibility under Criterion C for "the distinct characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent significant and distinguishable entity whose components may lack individual distinction." Therefore, constructing the Proposed Project and its APM connection to the main terminal would not affect the architectural style, integrity, and significant technological and design innovations of the Airport's Site HI14544 eligibility for listing on the NRHP as defined in 36 Code of Federal Regulations (CFR) 800.5.

[24] Under Section 106, an undertaking is the proposed action, or project.

Figure 3-8: Previously Recorded Cultural Resources within One Mile of the Proposed Project



The APE was extensively disturbed when Tampa International Airport was originally constructed. There are no archaeological resources located within the APE. The Proposed Project includes ground-disturbing activities occurring entirely on land previously disturbed and developed for aviation activities (original Airside D, apron, taxiways) and would not affect archaeological resources.

The Proposed Project's ground-disturbing activities occur entirely on land previously disturbed and developed for aviation activities. The Proposed Project would not affect tribal land or land of interest to tribes.

An AEM noise analysis was conducted for the Proposed Project. The Proposed Project's potential change in the DNL 65 dBA contour is 0.6% in 2032 (or approximately 19 acres of a total 2,336-acre contour). According to FAA Order 1050.1F Desk Reference, "If the AEM calculations indicate that the action would result in less than a 17 percent (approximately a DNL 1 dB) increase in the DNL 65 dB contour area, there would be no significant impact over noise sensitive areas, and no further noise analysis would be required" (Federal Aviation Administration, 2020). The Proposed Project would increase operations and aircraft taxiing noise adjacent to the Main Terminal (Site ID HI14544). However, it would not significantly increase noise levels at Site ID HI14544 or introduce significant audible elements that would be out of character. Accordingly, it would not have an adverse effect on them as defined in 36 CFR 800.5. It would not affect the architectural style, integrity, and significant technological and design innovations of the Airport's (Site ID HI14544) eligibility for listing on the NRHP.

The construction and operation of the Proposed Project would not significantly affect air quality or violate local, state, tribal, or federal air quality standards under the Clean Air Act Amendments of 1990. The Proposed Project would not significantly increase construction or operational air emission levels at Site ID HI14544 or introduce significant atmospheric elements that would be out of character. Accordingly, it would not diminish the integrity of the property's historic features defined in 36 CFR 800.5. Therefore, the Proposed Project would not affect the architectural style, integrity, and significant technological and design innovations of the Airport's (Site ID HI14544) eligibility for listing on the NRHP.

Potential aesthetic effects of an action are generally assessed by comparing the visual characteristics of the proposed development to existing development in the areas and to the environmental setting. The visual effects resulting from constructing and operating the Proposed Project would result from physical changes to the visual character of the APE, including existing development, landforms, vegetation, and water surfaces.

Construction of the Proposed Project would occur during the day. There is the potential for night-time work that would require additional lighting; however, this lighting would be directional and last only for the duration of night-time construction work. The temporary use of directional lighting for construction purposes would not result in light emission impacts on

the surrounding area, including cultural resources. The Proposed Project would occur entirely on-Airport property, would be consistent with the existing Airport environment, and would not result in viewshed changes or additional light emissions of cultural resources. The Proposed Project would not introduce visual elements that would be out of character. Accordingly, it would not diminish the integrity of the property's historic features defined in 36 CFR 800.5.

Operation of the Proposed Project would be visually different, with increased operations and aircraft taxiing adjacent to the main terminal. It would not affect the architectural style, integrity, and significant technological and design innovations of the Airport's (Site ID HI14544) eligibility for listing on the NRHP. Operation of the Proposed Project would include permanent outside lighting to move aircraft, vehicles, and people safely. Public views of the new Airside D would be obscured by the existing multi-lane Veterans Expressway, Hillsborough Avenue, commercial businesses, and other on-Airport structures. See ***Appendix F*** for more information.

Determination of Effects

The Proposed Project occurs entirely on land previously disturbed and developed for aviation activities. The Proposed Project's construction and operation would not directly or indirectly affect any cultural resources (e.g., noise, air, visual) other than the Tampa International Airport (8HI14544). However, the likely effects on Tampa International Airport would not alter any aspect of this resource from which it derives its significance under Criterion C for NRHP eligibility. Therefore, the likely effects to the Tampa International Airport will not constitute *adverse effects* as defined in 36 CFR 800.5. Because the Proposed Project does include ground disturbance activities, the Authority will implement special conditions regarding unexpected discoveries during construction.

The FAA consulted with the Muscogee (Creek) Nation and the Miccosukee Tribe of Indians of Florida offering the Tribes the opportunity to describe any concerns or interests in the project (see ***Appendix F*** for the FAA's Tribal correspondence). The Muscogee (Creek) Nation concurred with the FAA's determination of ***no adverse effects*** to any known historic properties (see ***Appendix F***). The Miccosukee Tribe of Indians of Florida did not reply to the FAA's correspondence.

Based on an evaluation of the details of the Proposed Project in conjunction with the research and analysis summarized in this CRAS, the FAA concluded that the Proposed Project ***will have no adverse effect*** on historic properties (i.e., properties that are eligible for or listed on the NRHP). On February 20, 2024, the Florida State Historic Preservation Office (SHPO) concurred with the FAA's ***no adverse effect*** on historic properties determination. See ***Appendix F*** for further details.

Mitigation Measures

The Muscogee (Creek) Nation's March 6, 2024 email stated that due to the historic presence of Muscogee people in the project area, inadvertent discoveries of cultural resources, human

remains and related NAGPRA items may occur, even in areas of existing or prior development. Should this occur, the Muscogee (Creek) Nation requested that all work cease and their office along, with other appropriate agencies, be notified immediately (see ***Appendix F***).

Because the Proposed Project would have no adverse effect on historic properties, the HCAA does not propose mitigation measures.

3.4.5 Natural Resources and Energy Supply

This section describes the existing conditions and significance threshold(s) pertaining to natural resources and energy supply. This section also describes the Proposed Project's potential natural resources and energy supply effects compared to the No Action Alternative.

3.4.5.1 Affected Environment

Sections 1502.16l and (f) of the CEQ Regulations require federal agencies to consider the use of consumable natural resources, demands on energy supplies from projects, and the conservation potential of alternatives and mitigation measures. FAA policy also encourages developing facilities to use the highest design standards and to incorporate sustainable measures into designs.

Airport personnel and tenants regularly use consumable materials to maintain various airside and landside facilities and services. Those materials may include asphalt, concrete, aggregate for sub-base materials, various metals associated with such maintenance, and fuels associated with the operation of aircraft and vehicles.

Tampa Electric Company (TECO) supplies electricity to the Airport. According to the 2024 Sustainable Management Plan (SMP), the primary energy users are the Airport's main terminal and four airsides (A, C, E, and F). During 2021, the Airport's electrical usage (including tenants) was 131,819,931 kilowatt hours (kWh). HCAA has been working to reduce TPA's electricity consumption in accordance with its sustainability goals, achieving a 13% reduction from 2019 to 2021. According to the HCAA, the Airport's central utility plant can meet the Airport's electrical needs. TECO can generate more than 5,000 megawatts for users of TECO (Emera, 2022). The City of Tampa can produce up to 120 million gallons of water daily; the current average water production per day is 81 million gallons (City of Tampa, 2022).

The HCAA has implemented various sustainability initiatives at the Airport. The HCAA 2024 SMP results from a process of continuous improvement beginning in 2012 with a Sustainable Management Policy for the Airport, followed by the HCAA's first Sustainable Management Plan in 2014. The 2024 SMP results set the direction for the next ten years of sustainable and resilient development at HCAA.

Additionally, the HCAA has installed 176,000 square feet of solar arrays and various LED fixtures in the terminal and airfield to lower electricity usage at the Airport (Tampa International Airport, 2023). Water use at the Airport has been reduced with reclaimed water for irrigation

and cooling towers on an as-needed basis (Tampa International Airport, 2023). Additionally, the HCAA uses rainwater harvesting and low-impact landscape maintenance to lower water demands (Tampa International Airport, 2022).

3.4.5.2 Environmental Consequences

Significance Threshold

FAA Order 1050.1F does not define a significance threshold for natural resources and energy supply; however, it does provide a factor to consider in evaluating the context and intensity of potential environmental impacts. Potentially significant effects could occur if the action has the potential to cause demand to exceed available or future supplies of these resources, which include aviation and surface vehicle fuel, construction material, and electrical power.

Available industry information related to sustainable design and practices was reviewed to describe measures to reduce the potential landside development demands on natural resources and energy supplies. These useful references, recognized by the FAA, are:

- Airports Cooperative Research Program (ACRP) Synthesis 10, Airport Sustainability Practices
- Sustainable Aviation Guidance Alliance Database

Potential Impacts

The construction of the Proposed Project would temporarily increase the use of natural resources at the Airport. These resources could include prefabricated building components, aggregate, sub-base materials, and oils. These resources are not rare or in short supply, and the quantity required for development of this size would not place an undue strain on supplies within the Bay area. Construction would also increase the energy demand at the Airport; however, the increase would be temporary and minor and within the supply capabilities of TECO.

Construction of the Proposed Project would temporarily increase fuel usage from construction-related vehicles accessing the Direct Study Area. In addition, the Proposed Project could include diesel generators for backup electrical needs. The operation of the Proposed Project would increase aviation fuel use at the Airport. In 2032, the Proposed Project would increase aircraft operations by 2,000. Compared to the Airport's total forecast of approximately 287,400 operations in 2032, this increase in operations is 0.70% greater than the No Action Alternative. Therefore, while the Proposed Project would increase aviation fuel, it would not significantly affect fuel supplies or usage.

For this EA, water consumption per square foot was calculated for the Proposed Project. Water consumption (gallons) for Airside C was used to establish a water consumption per square foot for Airside D. Airside C is 320,062 square feet, the largest and most recently constructed airside. HCAA's water consumption records show that Airside C annually uses about 20.3

million gallons of water (about 63.31 gallons of water per square foot of space). Airside C's average daily water use is about 55,516 gallons (i.e., 20.3 million gallons divided by 365 days). The 63.31 gallons per square foot of space was calculated for the Proposed Project's 563,000-square-foot facility. The Proposed Project is calculated to use about 35.6 million gallons of water annually (about 97,654 gallons per day). The Proposed Project's total water consumption is well below the City's average water production per day of 81 million gallons (0.12 % of the City's daily water production). It does not include the HCAA's continuing goals to reduce water use at the Airport. The HCAA would coordinate with the City of Tampa regarding additional water supply.

The HCAA regularly meets with TECO to discuss their needs and upcoming projects, including the proposed Airside D. The existing central utility plant would accommodate the Proposed Project's electrical demand. For this EA, electrical consumption per square foot was calculated for the Proposed Project. Airside C's electrical consumption (kilowatt hours) was used to establish an electrical consumption per square foot for Airside D. Airside C is 320,062 square feet is the largest and most recently constructed airside. HCAA's electrical consumption records show Airside C annually uses about 15.9 million kilowatt hours (about 49.59 kilowatt hours per square foot of space annually). Airside C's average daily electricity use is about 43,561 kilowatt hours (i.e., 15.9 million kilowatt hours divided by 365 days). The 49.59 kilowatt hours per square foot of space was calculated for the Proposed Project's 563,000-square-foot facility. The Proposed Project is calculated to use about 27.9 million kilowatt hours annually (about 76,438 kilowatt hours per day). This total kilowatt hours does not include the HCAA's ongoing sustainability goals to reduce electricity use at the Airport. The energy increase is not expected to be significant or place undue strain on TECO's capacity, and the energy provider is not concerned about power supplies. TECO can meet all electrical requirements, and the City of Tampa can meet the water supply demands of the Airport. Additionally, the design of the Proposed Project could include the implementation of energy-efficient light fixtures, LED lighting, solar gray tinted exterior glass, low-flow toilets, and automatic faucets, which would be more energy and water-efficient.

The construction and operation of the Proposed Project should not significantly increase the use of natural resources and energy supplies. According to the HCAA, the design-builder would review and perform a demand analysis once the initial early design is completed. This analysis would then be reviewed, and where necessary, any additional utilities would be engineered and brought to or from (in case of wastewater) the Proposed Project.

Therefore, compared to the No Action Alternative, the Proposed Project would not significantly increase the use of fuel or water.

Mitigation Measures

Construction and implementation of the Proposed Project would not significantly affect natural resources and energy supply. Therefore, no mitigation is required or proposed.

3.4.6 Noise and Noise-Compatible Land Use

This section describes the existing conditions and significance threshold(s) pertaining to noise and noise-compatible land use. This section also describes the potential noise effects of the Proposed Project compared to the No Action Alternative in 2027 and 2032.

Day-Night Average Sound Level (DNL) is a 24-hour time-weighted sound level expressed in A-weighted decibels. DNL includes the cumulative effects of several sound events rather than a single event. It also accounts for increased sensitivity to noise during relaxation and sleeping hours. In the calculation of DNL, for each hour during the nighttime period (10:00 p.m. to 6:59 a.m.), the sound levels are increased by a 10-decibel weighting penalty (equivalent to a 10-fold increase in aircraft operations) before the 24-hour value is computed. The weighting penalty accounts for the more intrusive nature of noise during the nighttime hours. The FAA requires DNL as the noise descriptor in aircraft noise exposure analysis and noise compatibility planning. DNL levels are commonly shown as lines of equal noise exposure, similar to terrain contour maps, referred to as noise contours.

3.4.6.1 Affected Environment

In December 2021, the Authority finalized a 14 CFR Part 150 (Part 150) Noise Exposure Map Update (NEM) for the Airport. The NEM included noise contours for 2021, which represent the existing noise conditions at the Airport. ***Figure 3-9*** depicts 2021 65, 70, and 75 DNL contours on an existing land use map. The total area encompassed by 2021 65 DNL and greater contours is 1,861 acres, 304 acres of which are located off-Airport property.

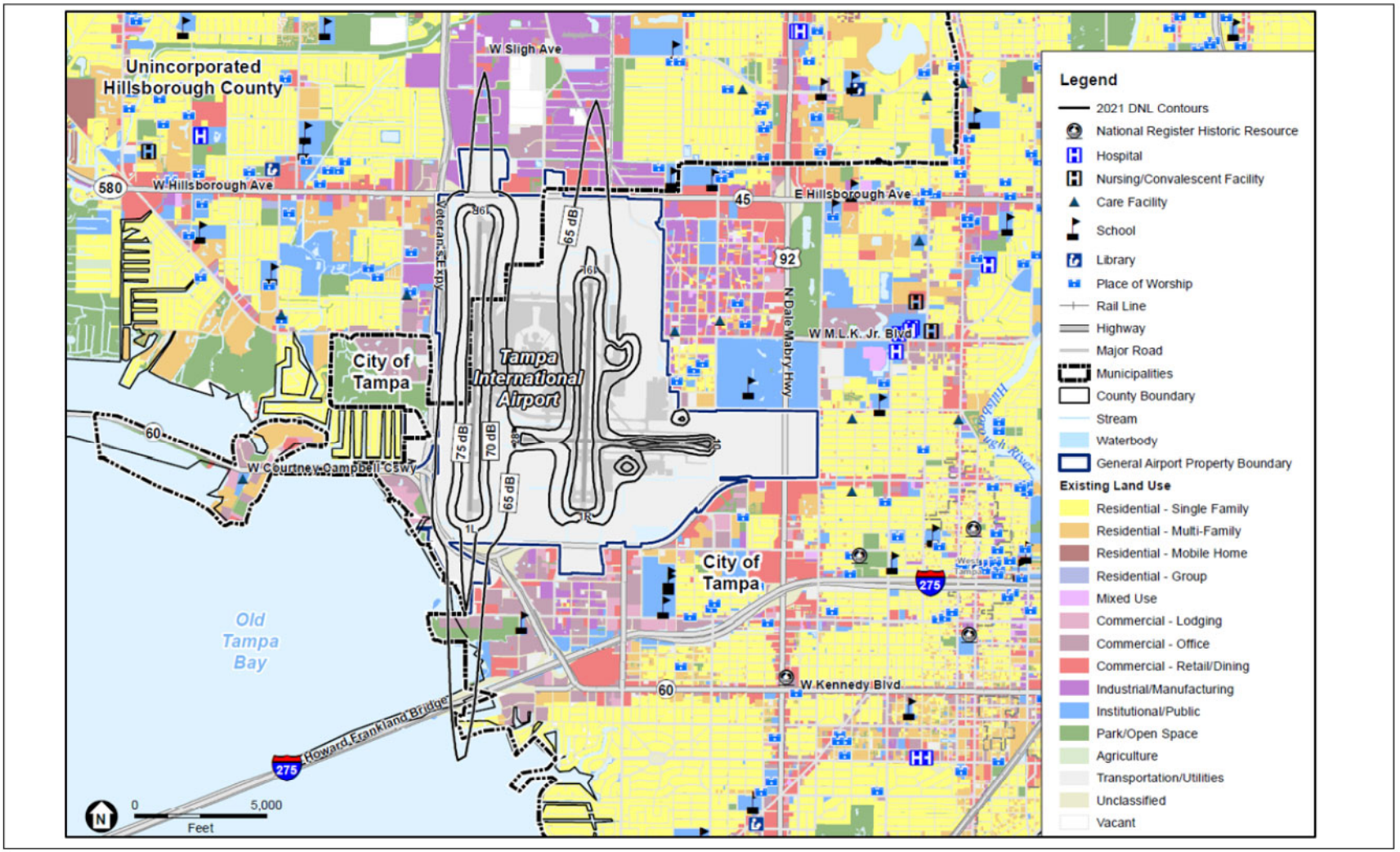
The total off-Airport acres for each land use category within the 65 DNL and higher contours are shown in ***Table 3-6***. ***Table 3-6*** also presents the estimated number of housing units and population exposed to 65 DNL and higher in 2021. The 65 DNL contour includes 36 residents and 14 housing units located approximately one and a half miles south of the approach end of Runway 1L. All 14 housing units have participated in TPA's Voluntary Noise Abatement Program by receiving soundproofing and are considered compatible land uses for this EA.

Table 3-6: Land Use and Population within 2021 65 DNL and Higher Noise Contours

Land Use	65-70 DNL (acres)	70-75 DNL (acres)	75+ DNL (acres)	Total (acres)	Housing Units	Population
Residential - Single Family	3.3	0.0	0.0	3.3	14	36
Commercial - Office	13.4	0.0	0.0	13.4	0	0
Commercial - Retail/Dining	20.6	0.0	0.0	20.6	0	0
Industrial/Manufacturing	58.4	0.0	0.0	58.4	0	0
Institutional/Public	3.1	0.0	0.0	3.1	0	0
Park/Open Space	40.7	0.0	0.0	40.7	0	0
Transportation/Utilities	6.9	0.0	0.0	6.9	0	0
Unclassified	86.9	6.8	0.1	93.8	0	0
Vacant	0.5	0.0	0.0	0.5	0	0
Water	62.8	0.0	0.0	62.8	0	0
Total	**296.7**	**6.8**	**0.1**	**303.6**	**14**	**36**

Source: TPA 14 CFR Part 150 Noise Exposure Map Update, December 2021.

Figure 3-9: 2021 Airport Noise Contours



Source: ESA, 2021.

3.4.6.2 Environmental Consequences

Significance Threshold

The Area Equivalent Method (AEM) is an FAA-approved aircraft screening tool. The AEM is for "evaluating proposed actions and alternative(s) at an airport which result in a general overall increase in daily aircraft operations or the use of larger/noisier aircraft, as long as there are no changes in ground tracks, flight profiles or runway use." According to FAA Order 1050.1F, Desk Reference, "If the AEM calculations indicate that the action would result in less than a 17 percent (approximately a DNL 1 dB) increase in the DNL 65 dB contour area, there would be no significant impact over noise sensitive areas, and no further noise analysis would be required. If the AEM calculations indicate an increase of 17 percent or more, or if the action is such that the use of the AEM is not appropriate, then the noise analysis must be performed using the Aviation Environmental Design Tool (AEDT) to determine if significant noise impacts would result."

Potential Impacts

A noise screening analysis was prepared to evaluate the change in noise levels associated with the Proposed Project. The Proposed Project would increase annual aircraft operations by 462 in 2027 and 2,000 in 2032. As the 2032 study year has the larger increase in aircraft operations (i.e., 2,000), the change in noise exposure due to the Proposed Project was assessed by comparing the 2032 Proposed Project to the 2032 No Action Alternative. For projects in which the planned changes involve only operations and fleet mix (and not flight tracks, flight profiles, or runway modifications), the procedure for assessing noise exposure is as follows:

1. Conduct a noise screening analysis using the FAA's Area Equivalent Method (AEM) model. If the potential for significant noise impact results, proceed to step 2.
2. Conduct detailed noise contour modeling and develop Day-Night Average Sound Level (DNL) contours using the FAA's Aviation Environmental Tool (AEDT).

For step 1, FAA regulations stipulate that an increase in the 65 DNL contour area of 17% requires the development of noise contours using AEDT is required, which is step 2. If AEM computes an increase of less than 17%, then there are no significant noise impacts, and no further noise analysis is required. The AEM does not produce noise contours, only an estimate (in square miles) of the area potentially affected. The most recent version of AEM, Version 2c SP2, was used for this analysis.

The AEM results indicate that the Proposed Project would increase the 65 DNL contour area by 0.6% (19 acres) in 2032. While the AEM does not provide a visualization of the change in the 65 DNL contour, this calculated increase is well below the FAA's 17% threshold for additional analysis, and there would not be an appreciable change in the aircraft noise environment.

Therefore, the Proposed Project does not result in a significant noise impact, and no further noise analysis is necessary (see ***Appendix B*** for further details).

Mitigation Measures

Implementing the Proposed Project would not result in a significant noise impact. Therefore, mitigation measures are not proposed or required.

3.4.7 Socioeconomics

This section describes the existing socioeconomic conditions. This section also describes the significance thresholds and potential socioeconomic effects of the Proposed Project compared to the No Action Alternative.

3.4.7.1 Affected Environment

Socioeconomics is an umbrella term for a project's social or economic aspects or a combination of the two. A socioeconomic analysis evaluates how elements of the human environment, such as population, employment, housing, and public services, might be affected by a Proposed Project and alternative(s).

This section describes the existing demographics of the area in and around the Direct Study Area as they relate to socioeconomics. U.S. Census Bureau information for the City of Tampa and Hillsborough County is the basis of the socioeconomic analysis. Population, income, and housing for the City of Tampa and Hillsborough County are included as the basis for evaluating potential socioeconomic impacts.

The Airport is a driver of economic activity for the City of Tampa, Hillsborough County, and the State of Florida. In 2019, the Florida Department of Transportation (FDOT) determined that the Airport generated $4.5 billion in personal income and approximately $14.5 billion in total economic output (Florida Department of Transportation, 2019). As of 2022, the Airport and its tenants employed approximately 10,500 employees (Tampa International Airport, 2022).

According to the U.S. Census data, the City of Tampa has a population of 384,959, an average household income of $63,404, and 170,964 housing units (U.S. Census Bureau, 2022). Hillsborough County has a population of 1,459,792, an average household income of $65,905, and 602,886 housing units (U.S. Census Bureau, 2022). The Direct Study Area is within the Airport property. As a result, no population would be affected within the Direct Study Area.

Public services at the Airport include firefighting and law enforcement. The Airport has an Aircraft Rescue and Fire Fighting (ARFF) facility to fight fires. Law enforcement at the Airport is provided by the Tampa International Airport Police Department, which provides traditional law enforcement services and, in addition, transportation security (Tampa International Airport, 2022).

The HCAA has recently completed several projects that have improved the on-Airport roadways and their levels of service (LOS). Surface transportation improvements recently completed at the Airport include improvements to George Bean Parkway and additional lanes on the Red and Blue curbsides. The HCAA also constructed a multi-story Consolidated Rental Car Facility (CONRAC), new Employee/Tenant Parking, and HCAA's new administrative offices. An Automated People Mover (APM) connects these facilities to the Main Terminal. These projects moved the transportation of surface vehicles away from the on-Airport roads circulating the Main Terminal. The HCAA also recently improved its curbsides for arriving and departing passengers. In 2021, the HCAA completed Blue Express Curbsides for arriving and departing passengers. In 2022, the HCAA began construction on the Red Express Curbsides. These projects were designed to reduce congestion for arriving and departing passengers picked up or dropped off at the Airport. These improvements assist passengers without checked baggage with the ability to be picked up or dropped off, bypassing the ticketing and baggage claim levels.

3.4.7.2 Environmental Consequences

Significance Threshold

FAA Order 1050.1F does not provide a significance threshold for socioeconomics. It does provide several factors to consider in evaluating the context and intensity of potential environmental effects. Factors considered include the potential of the action to:

- Induce substantial economic growth in an area, either directly or indirectly (e.g., through establishing projects in an undeveloped area)
- Disrupt or divide the physical arrangement of an established community
- Cause extensive relocation when sufficient replacement housing is unavailable
- Cause extensive relocation of community businesses that would cause severe economic hardship for affected communities
- Disrupt local traffic patterns and substantially reduce the levels of service of roads serving an airport and its surrounding communities.
- Produce a substantial change in the community tax base.

Potential Impacts

The Proposed Project would increase the Airport's and the community's economic activity compared to the No Action Alternative. The Proposed Project would result in short-term construction-related employment of local contractors, which could have a positive effect. Construction-related impacts would be temporary and are not expected to cause a significant secondary (induced) impact on the surrounding area.

The Proposed Project's employment opportunities can also be considered a positive, long-term secondary impact. Compared to the No Action Alternative, the Proposed Project would

increase the number of airline and Airport employees, including baggage handlers, janitors, and concessionaire employees at TPA. Most employees are expected to be from the Bay area.

As described above, recent on-Airport roadway improvements (e.g., widening the entrance/exit parkway, expansion of Blue and Red Curbsides with additional lanes) as well as new facilities in the south terminal support area (e.g., CONRAC, Employee/Tenant parking, and HCAA offices), were planned and constructed to meet the surface transportation needs of the Airport's 20-year demand.

The TPA MPU conducted a curbside and roadway LOS analysis to model modes of travel and roadway characteristics accessing the Airport. The FAA-approved 2022 TPA MPU forecast for passengers and operations was used to calculate future curbside and access roadways LOS. According to the Transportation Research Board, Levels of Services are described as follows:

- LOS A – Excellent,
- LOS B – Very Good,
- LOS C – Good,
- LOS D – Fair,
- LOS E – Poor, or
- LOS F – Failure.

A LOS D is acceptable during peak hours, while a LOS E or F would require improvement. ***Table 3-7*** shows that the traffic analysis concluded that the Airport's curbside LOS through 2032 was LOS D or better. Therefore, additional curb length and through lanes are not required. For accessing the Airport, the TPA MPU studied approximately 25 access roadway segments (i.e., on-Airport property and roadway ramps to and from the Airport), including but not limited to George J Bean Parkway, Memorial Highway, Veterans Expressway, Spruce Street, West Cypress Street, and Interstate 275. In 2032, roadways studied had an LOS greater than or equal to "D," and 88% of those studied had a LOS B or greater.

Therefore, the Proposed Project's increased traffic demand would not significantly affect the Airport's future curbside or roadways accessing the Airport. The Proposed Project would not disrupt local traffic patterns nor substantially reduce the LOS of roads serving the Airport.

The Proposed Project would not cause shifts in the projected population growth, cause changes to population movement, or result in the need for extensive relocations. The Proposed Project does not anticipate increasing the demand for fire and life safety services. There is the potential for additional Airport Police Department personnel to secure the new Airside D. Compared to the No Action Alternative, the Proposed Project would not disrupt any nearby surrounding communities of any planned development, relocate community businesses, and it would be consistent with the plans and goals of the community.

Table 3-7: 2032 Peak Hours Roadway Level of Service

Roadway Segment	Peak Hour Volume	Volume/ Capacity Ratio	Level of Service
Access Road to Airport Service/Bessie Coleman Blvd	190	0.19	A
George Bean (GB) Parkway (Pkwy) Northbound (NB)- North of Blue Entrance	1,840	0.71	C
GB Pkwy Southbound (SB)	1,760	0.68	B
Ramp back to Red Airside	200	0.2	A
Airport Recirculation Ramp	790	0.39	A
GB Pkwy SB Ramp to Airport Service Road Eastbound (EB)	310	0.31	A
Airport Service Road Westbound (WB) Ramp to GB Pkwy SB	725	0.36	A
Bessie Coleman Blvd (one-way) NB	635	0.63	B
Terminal Short-term Ramp NB	1,233	0.81	D
GB Pkwy NB – near Cell Phone Lot	1,370	0.45	A
GB Pkwy SB from Economy Parking WB	925	0.72	C
GB Pkwy SB to Economy Parking EB	730	0.57	A
Spruce St. to GB Pkwy NB	550	0.36	A
GB Pkwy NB Ramp from SR 60	1,165	0.38	A
GB Pkwy NB Ramp	1,550	0.51	A
GB Pkwy SB Ramp to I-275 SB	1,240	0.69	B
GB Pkwy SB Exit Ramp	620	0.41	A
GB Pkwy SB Exit Ramp	910	0.59	A
Bessie Coleman to GB Pkwy NB	570	0.44	A
Short Exit from Pay Parking	30	0.03	A
Long Exit form Pay Parking to Recirculation Ramp	60	0.06	A
Exit Pay Parking to GB Pkwy SB	630	0.49	A
GB Pkwy SB Exit to Cypress St (O'Brien St)	120	0.09	A
GB Pkwy SB Exit Rampa to I-275 NB	810	0.63	B
GB Pkwy SB Exit Ramp to Spruce St.	730	0.57	A

Notes: GB Pkwy: George Bean Parkway; NB: Northbound; SB: Southbound; EB: Eastbound; and WB: Westbound
Source: AECOM, 2022. Ricondo & Associates, Inc 2022, RS&H, 2023.

Mitigation Measures

The Proposed Project would have no significant impact on socioeconomics. No mitigation is required or proposed.

3.4.8 Visual Effects

This section describes the existing conditions and significance threshold(s) pertaining to visual effects and the potential visual effects of the Proposed Project compared to the No Action Alternative.

3.4.8.1 Affected Environment

According to FAA 1050.1F Desk Reference, "visual effects deal broadly with the extent to which the proposed action or alternative(s) would either: 1) produce light emissions that create [an] annoyance or interfere with activities, or 2) contrast with, or detract from, the visual resources and/or the visual character of the existing environment."

The Direct Study Area is located northwest of the Main Terminal at the former site of Hardstand D. The viewshed of the Direct Study Area includes Airport facilities such as the terminal, concourses, Airport Traffic Control Tower, and hangar facilities. The closest residential population is located about 0.8 mile west of the Direct Study Area. No residents have a line of sight to the Direct Study Area from their home due to the distance from the Direct Study Area, as well as the presence of the Veterans Expressway, Hillsborough Avenue, existing landscaping, a sound wall, and commercial businesses located between the residences and the Airport. Existing permanent outside lighting provides for the safe movement of aircraft, vehicles, and people.

3.4.8.2 Environmental Consequences

Significance Threshold

FAA Order 1050.1F does not define a significance threshold for visual effects; however, Exhibit 4-1 of the Order provides several factors to consider in evaluating the context and intensity of potential environmental impacts.

For light emissions, these factors include the degree to which the action would have the potential to:

- "Create annoyance or interfere with normal activities from light emissions; and
- Affect the visual character of the area due to the light emissions, including the importance, uniqueness, and aesthetic value of the affected visual resources."

For visual resources/visual character, these include the extent the action would have the potential to:

- "Affect the nature of the visual character of the area, including the importance, uniqueness, and aesthetic value of the affected visual resources;
- Contrast with the visual resources and/or visual character in the study area; and

» Block or obstruct the views of visual resources, including whether these resources would still be viewable from other locations."

Potential aesthetic effects of an action are generally assessed by comparing the visual characteristics of the proposed development to existing development in the areas and to the environmental setting and by determining if a jurisdictional agency considers this contrast objectionable. The visual effects resulting from constructing and operating the Proposed Project would result from physical changes to the visual character of the Direct Study Area, including existing development, landforms, vegetation, and water surfaces.

Potential Impacts

Construction of the Proposed Project would occur during the day. There is the potential for night-time work that would require additional lighting; however, this lighting would be directional and last only for the duration of night-time construction work. The temporary use of directional lighting for construction purposes would not result in light emission impacts on the surrounding area.

The Proposed Project's conceptual illustrations are shown in ***Figure 3-10*** and ***Figure 3-11***. Operation of the Proposed Project would include permanent outside lighting to safely move aircraft, vehicles, and people. The closest residential area is about 0.8 mile west of the Proposed Project. The Veterans Expressway overpass, Hillsborough Avenue, existing landscaping, a sound wall, and commercial businesses obscure views from the residential area. The Proposed Project would occur entirely on-Airport property, would be consistent with the existing Airport environment, and would not result in viewshed changes or additional light emissions for off-Airport residents.

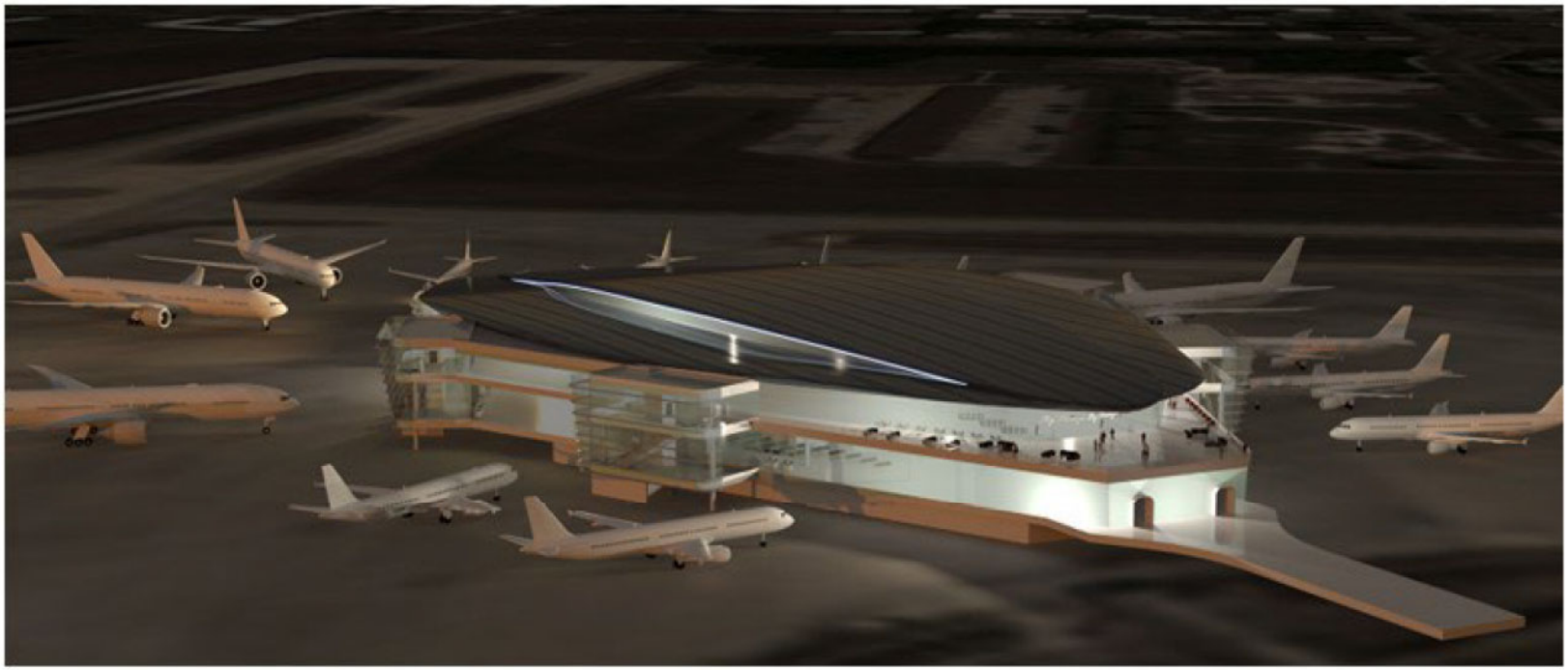
3.4.9 Water Resources (Floodplains)

This section describes the existing conditions and significance threshold(s) pertaining to floodplains and the potential floodplain effects of the Proposed Project compared to the No Action Alternative.

3.4.9.1 Affected Environment

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), the Direct Study Area is located in FIRM Map 12057C0331J (Federal Emergency Management Agency, 2022) and includes approximately 8.2 acres of isolated Zone A 100-year floodplain areas (see ***Figure 3-4***). The Indirect Study Area is in FIRM Map: 12057C0331J, 12057C0332J, 12057C0333J, and 12057C0334J (Federal Emergency Management Agency, 2022).

Figure 3-10: Proposed Project – Nighttime Conceptual Illustration



Source: HCAA, 2022.

RS&H

Figure 3-11: Proposed Project – Daytime Conceptual Illustration

Source: HCAA, 2022.

RS&H

Figure 3-12: Floodplains

3.4.9.2 Environmental Consequences

Significance Threshold

According to FAA Order 1050.1F, Desk Reference, "A significant floodplain encroachment under DOT Order 5650.2 is defined as an encroachment resulting in one or more of the following construction or flood related impacts: (1) a considerable probability of loss of human life; (2) likely future damage associated with the encroachment that could be substantial in cost or extent, including interruption of service on or loss of a vital transportation facility; and (3) a notable adverse impact on "natural and beneficial floodplain values." A significant floodplain encroachment is not necessarily a significant environmental impact under NEPA." The following questions were considered:

1. Would flooding affect airport or facility access roads, thereby preventing people from entering or exiting the area?
2. Would flooding affect aviation safety and the airport or facility's use?
3. Would flooding cause flood-induced spills of hazardous material stored at the airport or facility and their impacts on human populations?

Potential Impacts

The Proposed Project would encroach approximately 4.9 acres of Zone A 100-year floodplains. Approximately 3.2 acres of Zone A 100-year floodplain encroachment are impervious surfaces (i.e., apron and taxiways) in the existing condition. There are also approximately 1.7 acres of Zone A 100-year floodplain encroachment that are pervious in the existing condition and part of the Airport's existing stormwater management system. According to FEMA FIRM Map 12057C0331J, all impervious encroachment areas are considered isolated segments of the overall 100-year floodplain. Floodplain compensation for these encroachments is not required because they are small, isolated, and wholly within the Airport property. As such, offsite impacts would not occur. The pervious encroachment area is located within an existing stormwater pond, which is tidally connected to Old Tampa Bay. The Proposed Project would not require modification of the onsite stormwater management to compensate for rainfall-runoff with regard to the 4.25 acres of new impervious surface. Compensation is not required for any potential impact on a coastal (tidal) floodplain, as the ultimate outfall of this entire area is Old Tampa Bay. The Direct Study Area was also reviewed to determine where it was located in relation to the Limit of Moderate Wave Action (LiMWA) line. The Proposed Project is outside the LiMWA. As a result of the existing impervious surfaces and existing stormwater system, and the Authority's continued compliance with federal, state, and local regulations, the Proposed Project would not result in the following:

- affect airport or facility access roads, thereby preventing people from entering or exiting the area,
- affect aviation safety and the airport or facility's use, or

- cause flood-induced spills of hazardous material stored at the airport or facility and their impacts on human populations.

The Proposed Project will not result in:

1. a considerable probability of loss of human life;
2. a likely future damage associated with the encroachment that could be substantial in cost or extent, including interruption of service on or loss of a vital transportation facility; and
3. a notable adverse impact on "natural and beneficial floodplain values.

Therefore, the Proposed Project complies with EO 11988 and DOT Order 5650.2, and mitigation is not required.

Mitigation Measures

The Proposed Project would not adversely affect the floodplain, complies with EO 11988 and DOT Order 5650.2, and mitigation is not required.

3.5 CUMULATIVE IMPACTS

This section describes the cumulative projects and the significance threshold of cumulative effects. This section also describes the potential for the Proposed Project to contribute to potentially significant cumulative impacts when considered with those of other past, present, and reasonably foreseeable future actions.

The CEQ[25] defines 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. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

3.5.1.1 Cumulative Projects

Cumulative projects have been identified as on-Airport and off-Airport projects. On- and off-Airport projects that have occurred in the past (2016-2022), present (2023), and future (2024-2027) are included in this analysis.

Table 3-8 and ***Table 3-9*** describe each project's name, location, sponsor, expected completion/approval date, and project description.

Figure 3-13illustrates each cumulative project to the Proposed Project. Cumulative projects were identified by the Authority and through the Florida Department of Transportation (FDOT) Tampa Bay Area Project Finder (FDOT, 2023), Hillsborough County's Capital Improvement Program (Hillsborough County, 2023), and Hillsborough County's Targeted Redevelopment Program (Hillsborough County, 2023).

[25] 40 CFR Part 1508.7 (1978).

Figure 3-13: Cumulative Projects

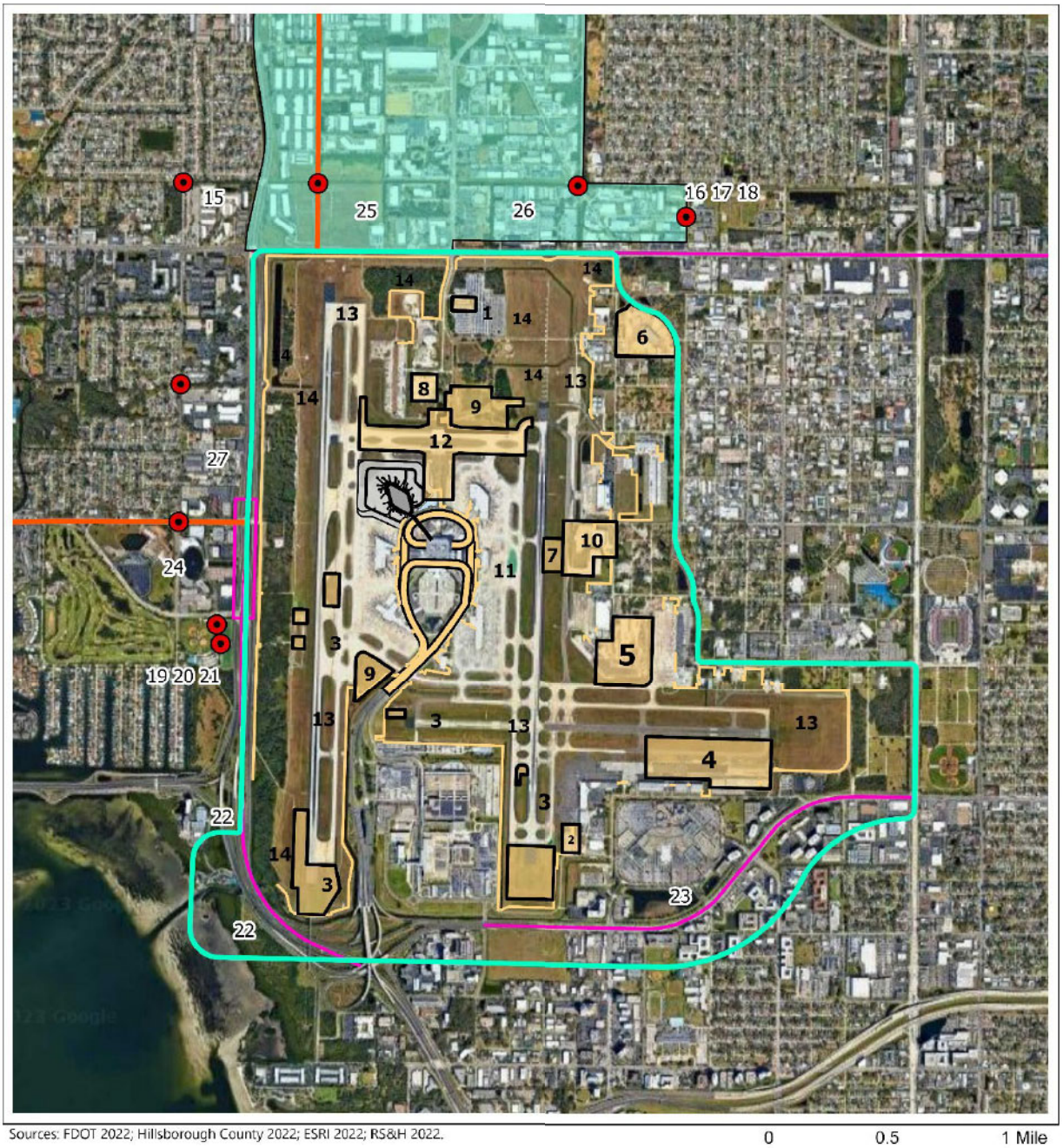


Table 3-8: Cumulative Projects: On-Airport Projects

Map Number	Year (Approval)	Project Name	Project Description
1	2022	Electric Bus Charging Station and Electric Buses	Reconfigure a small portion of an existing employee parking lot on the Airport's north side into an electric bus charging area and purchase electric buses.
2	2021	Jet ICU Hangar	Relocation of Jet ICU from its existing hangar north of Runway 10-28 along Air Cargo Road to the southeast side of Airport property along Airport Service Road.
3	2021	Runway Safety Area Grading & Drainage Improvements	Grading portions of the runway safety area to eliminate ponding and associated new and upsized drainage structures and pipe installations necessary to drain regraded areas away from the RSA to the existing outfalls.
4	2021	SheltAir Hangars 6 and 7	Construction of Hangars 6 and 7 at the Airport, located south of Runway 10-28 along Jim Walter Boulevard.
5	2019	United Parcel Service (UPS) Cargo Facility	Relocation and expansion of the current UPS operation at the Airport to a new location on Airport property.
6	2019	CAE USA Headquarters Campus Development	Construction and operation of the new CAE USA Headquarters Campus on Airport property.
7	2019	Connector Taxiway U	Reconstruction of existing Connector Taxiway U.
8	2019	LGSTX Air Cargo Truck Parking Lot	Construction of an air cargo truck parking lot.
9	2019	Remain Overnight Aircraft Parking Areas	Construction of two remain overnight (RON) aircraft parking areas at the Airport.
10	2018	United Airlines Maintenance, Repair, and Overhaul Facility	Construction of a United Airlines Maintenance, Repair, and Overhaul (MRO) facility includes a connector taxiway and shoulders, apron, hangar, vehicle parking area, surface road, fire suppression system, and FAA-compliant stormwater ponds.

Map Number	Year (Approval)	Project Name	Project Description
11	2017	On-Airport Roadway Improvements	Expansion and improvements of on-Airport roadways (Red Side – estimated completion in 2025).
12	2017	New Taxiway A and Bridge	Construction of a new Taxiway A and associated bridge.
13	2024	Airport Perimeter Fencing	Replacement and addition of new Airport perimeter fencing.
14	2024	Wildlife Hazard Remediation and Employee Parking Improvements	Implementing the Wildlife Hazard Management Plan and improving the North Employee Parking lot.

Source: HCAA, 2022.

Table 3-9: Cumulative Projects: Off-Airport Projects

Map Number	Year (Completion)	Project Name	Project Description
15	2018	KR Jetview (Hillsborough County Targeted Redevelopment Grant program)	Redevelopment of a corporate warehouse/flex space.
16	2024	Pierce Middle School Pedestrian Safety and Circulation Improvements (Hillsborough County Capital Improvement Program - HCCIP)	Safety improvement for students and pedestrians walking/biking to school and traffic circulation at drop off and pick up times.
17	2023	School Route Safety Improvements (HCCIP)	Addition of raised walks, speed management road treatments, and intersection pedestrian improvements.
18	2023	School Route Safety Improvements (HCCIP)	Addition of raised walks, speed management road treatments, and intersection pedestrian improvements.

Map Number	Year (Completion)	Project Name	Project Description
19	2023	Skyway Park Playground Shade (HCCIP)	Installation of a fabric sunshade structure at the existing Skyway Sports Complex playground.
20	2020	Skyway Park Synthetic Turf (HCCIP)	Construction of a multi-purpose synthetic sports field, including site work and miscellaneous amenities.
21	2022	Skyway Park ADA Improvements (HCCIP)	Addition of various improvements required to bring the site into compliance with the 2010 ADA Standards for Accessible Design.
22	2025	SR 60 WB Widening from Spruce St/TIA to Memorial Highway (FDOT)	Add one westbound lane on SR 60 from George Bean Parkway to the Courtney Campbell Causeway. Add a new ramp from westbound SR 60 to Independence Parkway.
23	2024	SR 616 (Boy Scout Blvd) Arterial Traffic Management System Upgrades from Airport Service Rd to Dale Mabry Hwy (FDOT)	Install fiber optic communications tools and hardware along Boy Scout Blvd between Airport Service Rd and Dale Mabry Highway to assist with traffic management.
24	2016	Memorial Hwy Pavement Treatment Program (HCCIP)	Resurface Memorial Highway from Veterans Expressway to Hillsborough Ave. Additionally, there will be ADA improvements, sidewalk repairs, and the construction of recommended rehabilitation.
25	2020	Benjamin Rd Resurfacing Project (HCCIP)	Resurfacing along Benjamin Rd from W Hillsborough Ave to W Waters Ave.
26	2024	US 92 (Hillsborough Ave) Arterial Traffic Management	Install fiber optic communications tools and

Map Number	Year (Completion)	Project Name	Project Description
		System Upgrades from Veterans Expressway to I-4 (FDOT)	hardware along Hillsborough Avenue between Veterans Expressway (SR 589) and I-4 to manage traffic.
27	2022	SR 589 (Veterans Expressway) Repaving Exit Ramps to Independence Parkway (FDOT)	Replacement of the top layer of asphalt with a high friction treatment to improve the exit ramp surface from SR 589 onto Independence Parkway.

Sources: FDOT 2022; Hillsborough County 2022.

3.5.1.2 Environmental Consequences

Significance Threshold

The analysis of potential cumulative effects uses the thresholds of significance in FAA Order 1050.1F, Exhibit 4-1, for each resource category.

Potential Impacts

The CEQ regulations require the analysis and disclosure of the Proposed Project's potential cumulative effects (40 CFR §§ 1508.25(a)(2) and (3)). This informs the public if the Proposed Project, when considered with other projects occurring within the project area during specific periods (i.e., "past, present, and reasonably foreseeable actions"), would cause a significant environmental effect. This EA uses the information presented in this chapter to determine potential cumulative impacts.

Each past, present, and reasonably foreseeable future action was qualitatively assessed for its potential to cumulatively affect the same environmental resources affected by the Proposed Project. Cumulative impacts are only considered for those resources the Proposed Project would affect (Air Quality; Climate; DOT Section 4(f) Resources, Hazardous Materials; Historic Architectural, Archaeological, and Cultural Resources; Natural Resources and Energy; Noise and Noise Compatible Land Use; Socioeconomics; Visual; and Water Resources – Surface Water). The Proposed Project would not result in cumulative impacts to resources that the Proposed Project would not affect (Biological Resources; Coastal Resources; Children's Health and Safety Risks; Environmental Justice; Farmlands, Land Use; Visual Effects; and Water Resources – Wetlands, Floodplains, Groundwater, and Wild and Scenic Rivers).

Implementation of the Proposed Project would cause less than significant environmental effects related to Air Quality and Climate (temporary construction-related air emissions, a minor increase in surface transportation vehicle emissions and aircraft operations); Hazardous

Materials (minor additional fuel use), Solid Waste (minor construction waste and MSW), and Pollution Prevention; Natural Resources and Energy Supply (minor increase in fuel, potable water, and electricity); Noise and Compatible Land Use (minor increase in aviation noise); Socioeconomics (positive increase in construction and permanent jobs); and Water Resources (small additional rainfall-runoff).

See ***Table 3-10*** for a summary of potential cumulative impacts. Each project's cumulative impact is assigned a rating of no impact, low impact, or moderate impact. There would not be any high impacts associated with the cumulative projects in conjunction with the Proposed Project's potential impacts. As shown in ***Table 3-10,*** although there is the potential for cumulative impacts to specific environmental resources, no reasonably foreseeable cumulative effects would be considered unique or of extraordinary magnitude. The likelihood that the Proposed Project would have a notable cumulative impact is generally low for most environmental resource categories. Additionally, no identified past, present, or future projects are considered enabling to, dependent upon, or otherwise connected to the Proposed Project.

Cumulative projects would result in construction activities affecting air quality, climate, hazardous waste, solid waste, pollution prevention, socioeconomics, and natural resources and energy supply. Cumulative projects that increase impervious surfaces have the potential to affect biological resources. Increases in impervious surface also increases the potential to increase rainfall runoff into local waterways. However, each project would include stormwater system development or improvements; therefore, cumulative impacts would be low.

As previous sections describe, the construction and operation of the Proposed Project would have less than significant impacts. When considered with projects that have occurred, are occurring, and are planned to occur in the reasonably foreseeable future, the Proposed Project would not cause significant environmental effects. It would not cause or contribute to significant cumulative environmental effects.

Conclusion

The Airport Sponsor's compliance with all federal, state, and local regulations and permit requirements (e.g., Generic Permit for Discharge of Ground Water from Dewatering Operations; HCEPC Collection/transmission system construction permit; HCDOH Drinking Water permit; FDEP ERP permit) would ensure that the Proposed Project would not exceed any significance thresholds identified in FAA Order 1050.1F. All future projects involving federal funding or approval would be subject to review under NEPA to determine the potential for significant environmental impacts to result from their construction or implementation. Therefore, the Proposed Project's construction and operation, combined with the past, present, and reasonably foreseeable future projects, would result in no significant cumulative environmental impacts.

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Table 3-10: Summary of Cumulative Impacts

Year	Map ID	Project Title	Air Quality	Biological Resources	Climate	Coastal Resources	DOT Section 4(f) Resources	Farmlands	Hazardous Materials, Solid Waste, Pollution Prevention	Historical, Architectural, and Archaeological Resources	Land Use	Natural Resources and Energy Supply	Noise and Noise-Compatible Land Use	Socioeconomics, Environmental Justice, and Childrens Environmental Health and Safety Risks	Visual Effects	Water Resources
		Proposed Project (no significant impacts)	***L***	***N***	***L***	***N***	***L***	***N***	***L***	***L***	***N***	***L***	***L***	***L***	***L***	***L***
		On-Airport Projects														
2017	11	On-Airport Roadway Improvements	L	N	L	N	N	N	L	N	N	L	N	L	N	N
2017	12	New Taxiway A and Bridge	L	N	L	N	N	N	L	N	N	L	L	L	N	N
2018	10	United Airlines Maintenance, Repair, and Overhaul Facility	L	L	L	N	N	N	L	N	N	L	L	L	L	L
2019	5	United Parcel Service (UPS) Cargo Facility	L	L	L	N	N	N	L	N	N	L	L	L	L	L
2019	6	CAE USA Headquarters Campus Development	L	L	L	N	N	N	L	N	N	L	N	L	L	L
2019	7	Connector Taxiway U	L	N	L	N	N	N	L	N	N	L	N	L	N	L
2019	8	LGSTX Air Cargo Truck Parking Lot	L	N	L	N	N	N	L	N	N	L	N	L	N	L
2019	9	Remain Overnight Aircraft Parking Areas	L	L	L	N	N	N	L	N	N	L	N	L	N	L
2021	2	Jet ICU Hangar	L	L	L	N	N	N	L	N	N	L	L	L	L	L
2021	3	Runway Safety Area Grading & Drainage Improvements	L	L	L	N	N	N	L	N	N	L	N	L	N	L
2021	4	SheltAir Hangars 6 and 7	L	L	L	N	N	N	L	N	N	L	L	L	L	L
2022	1	Electric Bus Charging Station and Electric Buses	L	N	L	N	N	N	L	N	N	L	N	L	N	N
2024	13	Airport Perimeter Fencing	L	L	L	N	N	N	L	N	N	L	N	L	N	N
2024	14	Wildlife Hazard Remediation and Employee Parking Improvements	L	M	L	N	N	N	L	L	N	L	N	L	M	L
		Off-Airport Projects														
2016	24	Memorial Hwy Pavement Treatment Program (HCCIP)	L	N	L	N	N	N	L	N	N	L	N	L	N	N
2018	15	KR Jetview (Hillsborough County Targeted Redevelopment Grant program)	L	N	L	N	N	N	L	N	N	L	N	L	N	N
2020	25	Benjamin Rd Resurfacing Project (HCCIP)	L	N	L	N	N	N	L	N	N	L	N	L	N	N
2020	20	Skyway Park Synthetic Turf (HCCIP)	L	N	L	N	L	N	L	N	N	L	N	L	N	N
2022	21	Skyway Park ADA Improvements (HCCIP)	L	N	L	N	L	N	L	N	N	L	N	L	N	N
2022	27	SR 589 (Veterans Expressway) Repaving Exit Ramps to Independence Parkway (FDOT)	L	N	L	N	N	N	L	N	N	L	N	L	N	N
2023	17	School Route Safety Improvements (HCCIP)	L	N	L	N	N	N	L	N	N	L	N	L	N	N
2023	18	School Route Safety Improvements (HCCIP)	L	N	L	N	N	N	L	N	N	L	N	L	N	N
2023	19	Skyway Park Playground Shade (HCCIP)	L	N	L	N	L	N	L	N	N	L	N	L	L	N

Year	Map ID	Project Title	Air Quality	Biological Resources	Climate	Coastal Resources	DOT Section 4(f) Resources	Farmlands	Hazardous Materials, Solid Waste, Pollution Prevention	Historical, Architectural, and Archaeological Resources	Land Use	Natural Resources and Energy Supply	Noise and Noise-Compatible Land Use	Socioeconomics, Environmental Justice, and Childrens Environmental Health and Safety Risks	Visual Effects	Water Resources
2024	16	Pierce Middle School Pedestrian Safety and Circulation Improvements (Hillsborough County Capital Improvement Program - HCCIP)	L	N	L	N	N	N	L	N	N	L	N	L	N	L
2024	23	SR 616 (Boy Scout Blvd) Arterial Traffic Management System Upgrades from Airport Service Rd to Dale Mabry Hwy (FDOT)	L	N	L	N	N	N	L	N	N	L	N	L	N	N
2024	26	US 92 (Hillsborough Ave) Arterial Traffic Management System Upgrades from Veterans Expressway to I-4(FDOT)	L	N	L	N	N	N	L	N	N	L	N	L	N	N
2025	22	SR 60 WB Widening from Spruce St/TIA to Memorial Highway (FDOT)	L	N	L	N	N	N	L	N	N	L	N	L	N	N

Notes: N – No Impact; L – Low Impact; M – Moderate Impact.

Source: RS&H, 2024.

4
AGENCY COORDINATION / PUBLIC OUTREACH

RS&H

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The EA coordination process described in this chapter provides interested agencies and the public the opportunity to comment on the potential effects of the construction and operation of the Proposed Project.

As NEPA and FAA Order 1050.1F require, a public involvement process will be conducted. This process provides the opportunity for public and agency input regarding the Proposed Project analyzed in this EA. The public and agency involvement process goals were to:

- Provide information about the Proposed Project's purpose and need and the alternatives the EA discusses.
- Obtain feedback about the above information from the public and agencies interested in and affected by the Proposed Project.
- Inform those interested that the EA provides a full and fair discussion of project-related environmental effects.
- Provide timely public notices to the interested parties so they may submit comments and participate in open public meetings concerning the Proposed Action.
- Record comments received from interested parties.

4.1 PUBLIC INVOLVEMENT AND AGENCY COORDINATION APPROACH AND PROCESS

Pertinent federal statutes, regulations, executive orders, and guidance are considered when conducting the public involvement process. The HCAA has hosted multiple stakeholder and public involvement meetings to allow public feedback for the 2022 Master Plan Update (MPU) (which includes the Proposed Project). As part of the 2022 Airport MPU public involvement (three public outreach meetings and five HCAA Board meetings), the public had been provided the opportunity to comment on the proposed Airside D and other MPU projects. During the 2022 Airport MPU Public Outreach #3, a member of the general public asked, "If we should grow, do you prepare to have the expansion [Airside D] ready earlier? Are there plans in place that it could be completed sooner?" The HCAA's consultant replied, "The MPU is two-fold, we are always planning to a demand level. We do not focus on the year, to allow airport to monitor how fast they are growing towards these plans." Upon review of the other MPU meeting minutes for the public outreach meetings and HCAA Board meetings, there were no general public comments specific to the construction or operation of Airside D. The HCAA also held public involvement meetings with various entities in the local Tampa Bay area and has, and will continue to have, meetings with local transportation planning organizations (TPO), local governments, local economic development councils (EDC), tourism boards, community organizations, and state government entities.

The 2022 Master Plan Update, which includes the Proposed Project, can be found at this link: https://www.tampaairport.com/2022-master-plan-update.

The Florida Department of Environmental Protection State Clearinghouse was sent an initial coordination letter providing details on the Proposed Project's components and an early opportunity to comment (see ***Appendix C***). The FDEP comments received in response to the initial coordination are reflected in the applicable sections of ***Chapter 3*** (Affected Environment and Environmental Consequences). The FDEP response letter is included in ***Appendix C***.

4.2 DISTRIBUTION OF DRAFT EA

A notice of availability for the Draft EA was published in the Tampa Bay Times on March 6, 2024 (see ***Appendix G***). The Draft EA was made available for a 30-day review at the Airport's administrative office and the Town N' Country Regional Library during normal business hours and on the Airport's website [www.tampaairport.com] (see ***Table 4-1***).

Table 4-1: Draft EA Available Locations

Location Name	Address
Hillsborough County Aviation Authority	5411 Skycenter Dr., Suite 220, Tampa, FL 33607
Town N' Country Regional Library	7606 Paula Dr. #120, Tampa, FL 33615

Source: RS&H, 2023.

4.3 DRAFT EA AGENCY AND PUBLIC COMMENTS

As described in the notice of availability, the public was offered the opportunity to request a public hearing by March 21, 2024 (see ***Appendix G***). The HCAA, nor its consultant RS&H, Inc., received any written correspondence from agencies or the public requesting a public hearing. Therefore, a public hearing for the Draft EA was not conducted.

During the Draft EA comment period (March 6 – April 5, 2024), no agency or public comments were received.

5
LIST OF PREPARERS

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5.1 PRINCIPAL PREPARERS

This section lists the EA's principal preparers, including HCAA and RS&H, Inc. representatives.

5.1.1 Hillsborough County Aviation Authority

Jeff Siddle, P.E.
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Richard Coudurier, P.E.
Position: Director of Planning and Design

Matthew W. DeLoatche, RA
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Daniel Porter
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5.1.2 RS&H, Inc.

David Alberts
Position: Project Manager, Senior Environmental Planner
Education: B.S. Geography
Experience: Mr. Alberts has 25 years of NEPA-related experience. He is the RS&H Project Manager and is responsible for the technical NEPA documentation and quality assurance of the NEPA analyses in the EA.

Dave Full, AICP
Position: Vice President, Aviation Environmental Planning Service Group
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Experience: Mr. Full has 37 years of experience. He is responsible for the independent quality assurance of the NEPA analyses in the EA.

Mike Alberts
Position: Senior Aviation Specialist
Education: B.S. Geography
Experience: Mr. Alberts has 29 years of aviation noise modeling/mitigation experience. He is responsible for the technical noise analysis in the EA.

Jon Erion
Position: Aviation Planner
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Michael Blackmore
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Monica Hamblin
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Audrey Hsu
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Education: B.S. Environmental Management and Protection
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6
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