


| <i>Viewpoint</i> | <i>Description of Existing View</i> |
|-------------------------------------|--|
| 17: Unai Dankulo, Looking Southwest | <p>Unai Dankulo is accessible through the forested Unai Dankulo Trail that opens to an expansive beach extending north. Viewpoint 17 looks southwest from the end of Unai Dankulo Trail, facing away from the beach toward Landing Zone 5. The beach and flat nearshore environment allow direct vehicle access to picnic spots that are located within somewhat shaded coconut groves adjacent to the beach. Thick grasses, shrub vegetation, and trees dominate the viewshed along Unai Dankulo Trail that leads to Unai Dankulo. While more windswept than the leeward beaches, the wind is buffered by inland vegetation.</p>  |

Legend: TNI = Francisco Manglona Borja / Tinian International Airport.

3.7 Transportation

This section discusses the existing ground, water, and air transportation systems on the island of Tinian. The existing transportation system on Tinian consists of paved and unpaved roads, the Port of Tinian, and TNI. The roadway transportation network providing access to the USAGM site on Saipan is also described.

3.7.1 Ground Transportation

Tinian has approximately 68 miles of roads, most of which were constructed in 1944 to accommodate heavy truck traffic when the military population on Tinian was approximately 150,000. The CNMI is responsible for basic maintenance and repair of roads within the Military Lease Area, however, DoD may exercise United States reserved rights to maintain, repair, or construct roads within the Military Lease Area. The Seabees repaired roads and constructed Marpo Heights Road on Tinian in 2022. Routine road maintenance within the former Lease Back Area is conducted by the CNMI Department of Public Works. The CNMI Department of Public Works owns and maintains all other roads on Tinian south of the Military Lease Area. Several roads are part of the CNMI Territorial Highway System and eligible for federal aid administered by the U.S. Department of Transportation Federal Highway Administration. There is no existing public transportation service on Tinian. Figure 3.7-1 shows the existing road network on Tinian.

Table 3.7-1 provides a description of key transportation routes in and near the Military Lease Area and provides traffic volumes documented in the *CNMI 20-Year Highway Master Plan* (CNMI Department of Public Works 2023). Broadway and Grand Avenue have the highest traffic volumes, with about 1,560 and 2,130 vehicles per day, respectively. Other roads not listed in the table typically have the following characteristics:

- Within the Military Lease Area: roads are generally unpaved and moderately to severely overgrown by vegetation with traffic volumes of less than 100 vehicles per day.
- Outside of the Military Lease Area: roads are generally two lanes wide (one for each direction of travel), paved and undivided with no median, and carry between 25 and 300 vehicles per day.

Table 3.7-1 Primary Roads on Tinian Within and Outside the Military Lease Area

| <i>Road Name</i> | <i>Description and Volumes</i> |
|-----------------------------|--|
| Broadway (Route 21) | <p>Within the Military Lease Area, Broadway is a two-lane, divided, paved road with 20-foot-wide lanes and a 32-foot-wide median between 72nd Street and 116th Street. Lack of maintenance has resulted in the southbound lane being moderately to severely overgrown by vegetation and unsuitable for use, resulting in motorists using the northbound side for travel in both directions. This segment carries about 130 vehicles per day.</p> <p>Outside of the Military Lease Area, Broadway is a two-lane, divided, paved road with 20-foot-wide lanes and a 32-foot-wide median. On the segment outside the Military Lease Area, Broadway carries about 1,560 vehicles per day south of 42nd Street and 300 vehicles per day north of 42nd Street.</p> |
| 8th Avenue (Route 23) | <p>Within the Military Lease Area, 8th Avenue is a two-lane, divided, paved road with 18-foot-wide lanes and a 36-foot-wide median. Lack of maintenance has resulted in the southbound lane being moderately to severely overgrown by vegetation and unsuitable for use, resulting in motorists using the northbound side for travel in both directions. This segment carries up to 70 vehicles per day.</p> <p>Outside of the Military Lease Area, this road has two distinct segments:</p> <ul style="list-style-type: none"> • From 42nd Street to TNI, 8th Avenue is a 24-foot-wide, two-lane, undivided, unpaved road in poor condition. This segment is located within a parcel formerly leased by the CNMI to the Alter City Group and had been marked as private property, with entry allowed only with the permission and consent of the Alter City Group. This segment carries about 140 vehicles per day. However, the CNMI Department of Public Lands terminated the public land lease for the Alter City project in August 2023 (De La Torre 2023), and thus public use of this road may resume in the future. • Near the Riverside Drive intersection, 8th Avenue is approximately 18- to 22-feet-wide, two-lane, undivided, paved/gravel road in poor condition. It carries approximately 180 vehicles per day on this segment. |
| 86th Street (Route 204) | 86th Street is a two-lane, undivided, paved road within the Military Lease Area that runs from 8th Avenue to Broadway (north of TNI). This road is in poor condition. It carries approximately 75 vehicles per day. |
| Canal Street (Route 202) | Canal Street is a two-lane, undivided road outside of the Military Lease Area that has no median and connects the village of San Jose to Broadway and residential and recreational areas to the northeast. It carries approximately 1,150 vehicles per day. |
| Grand Avenue (Route 201) | Grand Avenue is a two-lane, undivided road outside of the Military Lease Area that has no median and connects the village of San Jose to Broadway and residential and recreational areas to the east. It carries approximately 2,130 vehicles per day. |
| 42nd Street (Route 24) | 42nd Street is a two-lane, undivided road with no median that runs outside of the Military Lease Area from 8th Avenue to Broadway, north of the village of San Jose. It carries approximately 115 vehicles per day. |

Legend: TNI = Francisco Manglona Borja / Tinian International Airport.

Source: CNMI Department of Public Works 2023.



Figure 3.7-1 Existing Roads in and Near the Military Lease Area on Tinian

The U.S. Air Force is removing and replacing the existing deteriorated asphalt cap on approximately 2.5 miles of roadway from the Port of Tinian north to 8th Avenue, to its intersection with 42nd Street, and east along 42nd Street to its intersection with Broadway (U.S. Air Force 2020). Improvements related to the U.S. Air Force Divert project, including these roadway improvements, began in early 2022 and are anticipated to be completed in 2026 (U.S. Air Force 2020; NAVFAC Pacific 2022).

The level of service categorization (A through F, best to worst) provides a qualitative grade of roadway functionality, with an acceptable level of service at C or better. All roads on Tinian are operating below capacity, at a level of service A, as evidenced by free-flowing traffic and no traffic delays (CNMI Department of Public Works 2023).

The USAGM site on Saipan is located at the southwest area of Saipan and accessed from Lililok Lane, also known as Agingan Lane. Traffic along this lane is limited to workers accessing the wastewater treatment plant and visitors to Agingan Point.

3.7.2 Water Transportation

3.7.2.1 The Honorable Jose P. San Nicolas Commercial Port of Tinian

The Honorable Jose P. San Nicolas Commercial Port of Tinian (Port of Tinian), near San Jose, is owned by the Commonwealth Ports Authority. The North Wharf serves as the commercial Port for the island, which includes a usable length of 1,400 feet in three contiguous berths (Berths 1-3). Berth 4 is under a long-term lease and not available for commercial use. The connecting pier adjacent Berth 1 includes a roll-on roll-off ramp used for landing and loading of construction equipment (Commonwealth Ports Authority 2018). The small boat dock, located just north of the North Wharf at the Tinian Harbor, has a marina with 18 small craft mooring slips and a concrete boat ramp for launching and recovering small craft.

The harbor's 525-foot-wide channel provides access between the ocean and the Port of Tinian for commercial barges, recreational boats, the U.S. Coast Guard, and military ships. There were an estimated 53 vessel calls for cargo delivery to the Port during 2015, and historical trends show an average of 3 to 5 vessel calls per month at the North Wharf. Smaller, non-commercial cargo and other vessels may use the marina and launch ramp, but these are not counted by the harbor master in the vessel call data. The largest vessels that call at the harbor include a fuel tanker and commercial and military cargo vessels. The Tinian Harbor capacity is adequate to handle current cargo handling needs and may even operate under capacity at times. However, larger vessels can experience capacity constraints. For example, a fuel tanker would take precedence over other cargo ships or Marine Corps landing vessels, even if that vessel is unloading supplies. In that situation, the cargo ship or Marine Corps landing vessel would need to stop offloading and move to an anchorage to complete its discharge later (U.S. Army Corps of Engineers 2018). A 2020 Tinian Construction Capacity Study indicated that Tinian Harbor would be able to continue to support its existing shipping by tugboat for the island's day-to-day commodities without near-term repairs. However, without repairs, it has limited capacity to support any increased use (AS MD LLC 2020).

Approximately 90 percent of all goods and materials imported to Tinian arrive through the harbor. Findings from a 2018 Interim Feasibility Report Tinian Harbor Modification Study indicate the protective breakwater at Tinian Harbor is in a state of disrepair, likely resulting in future disruptions to Port operations and risks to harbor navigation and infrastructure (U.S. Army Corps of Engineers 2018). In July 2023, the Commonwealth Ports Authority Board adopted a joint area

development concept with the DoD for construction, repair, and maintenance activities at the Port of Tinian, including dredging the harbor to a depth of 28 feet (Commonwealth Ports Authority 2023).

Existing DoD usage of the Port consists of larger chartered cargo vessels and roll-on, roll-off integrated tug-barges, which use the North Wharf to unload materials and equipment due to their size; and military training events using smaller landing craft or boats for transporting people or equipment. Amphibious Assault and Amphibious Raid training events approved under the *2015 Mariana Islands Training and Testing EIS/OEIS* can use the concrete boat ramp and approved procedures for beach landings in the Military Lease Area (DON 2015; 2020).

3.7.3 Air Transportation

3.7.3.1 Francisco Manglona Borja/Tinian International Airport

Francisco Manglona Borja/Tinian International Airport (TNI) is owned, managed, and operated by the Commonwealth Ports Authority. It is a commercial airport used primarily for inter-island travel between Tinian, Saipan, Rota, and Guam. The airport runway supports departures and arrivals in two directions: east (Runway 08) and west (Runway 26), based on weather conditions and wind direction. The paved runway is marked for precision approaches and equipped with a navigational light system. There are no additional navigational aids, Air Traffic Control facilities, or Air Traffic Control services provided below 3,500 feet mean sea level for pilots arriving at or departing from TNI. Use of the airport occurs on a first-come, first-served basis, with pilots notifying each other of their intentions via the common traffic advisory frequency. The airport closes overnight from 10 p.m. to 6 a.m., unless prior arrangements are made with the Commonwealth Ports Authority.

Because TNI improvements that are part of the U.S. Air Force Divert project will be completed prior to the Proposed Action, the existing environment includes the U.S. Air Force Divert project improvements. These improvements include a maintenance facility; a fire pump building, tanks, and wells; fuel tanks; a cargo pad; a parking apron; taxiways; an access road from Broadway; and the relocation of 8th Avenue near the western end of the runway. A fuel pipeline will also extend from the Port of Tinian to the TNI to provide fuel to the future bulk fuel storage tanks at the airport. Three heliports are located on Tinian, all within 2.5 miles south of the airport, but they are not in use as no charter helicopter services have been provided since October 2016, following the permanent closure of the Tinian Dynasty Hotel and Casino.

Table 3.7-2 provides a summary of operations at TNI from 2013 to 2022, excluding the COVID years of 2019-2021. The existing airfield capacity of TNI is 164,000 annual operations (an operation is counted as each time an aircraft lands or departs a runway).

Table 3.7-2 Existing Operations at TNI

| <i>Period¹</i> | <i>Based Aircraft Total</i> | <i>Annual Operations</i> | | | | | |
|---------------------------|-----------------------------|--------------------------|-----------------------------|--------------------------------|--|---|-------------------------|
| | | <i>Air Carrier</i> | <i>Air Taxi²</i> | <i>General Aviation: Local</i> | <i>General Aviation: Itinerant³</i> | <i>U.S. Military: Itinerant³</i> | <i>Total Operations</i> |
| 2013 | 13 | 58 | 46,206 | 1,922 | 454 | 476 | 49,116 |
| 2014 | 15 | 50 | 41,944 | 5,900 | 998 | 274 | 49,166 |
| 2015 | 17 | 0 | 35,282 | 3,146 | 2,731 | 229 | 41,388 |

| <i>Period¹</i> | <i>Based Aircraft Total</i> | <i>Annual Operations</i> | | | | | |
|---------------------------|-----------------------------|--------------------------|-----------------------------|--------------------------------|--|---|-------------------------|
| | | <i>Air Carrier</i> | <i>Air Taxi²</i> | <i>General Aviation: Local</i> | <i>General Aviation: Itinerant³</i> | <i>U.S. Military: Itinerant³</i> | <i>Total Operations</i> |
| 2016 ⁴ | 19 | 0 | 21,610 | 2,365 | 5,154 | 78 | 29,207 |
| 2017 | 19 | 0 | 21,610 | 2,365 | 5,154 | 78 | 29,207 |
| 2018 | 19 | 0 | 21,610 | 2,365 | 5,154 | 78 | 29,207 |
| 2022 | 19 | 0 | 21,610 | 2,365 | 5,154 | 78 | 29,207 |

Legend: Air Carrier = commercial airline; Air Taxi & Commuter = commercial flights that originate within the CNMI; General Aviation = private aircraft; U.S. Military = military aircraft; U.S. = United States.

Notes: ¹ FAA Airport Master Records are not available for the period between 2019 to 2021.

² Air taxi flights are used as commuter flights between TNI and the Saipan International Airport.

³ Itinerant operations are those aircraft not based at the airfield.

⁴ A 29 percent decrease occurred between 2015 and 2016, which coincides with the closure of the Tinian Dynasty Hotel and Casino.

Sources: FAA 2013a, 2014a, 2015, 2016a, 2018, 2023.

In 2022, there were a total of 29,207 operations at TNI. Since 2016, the number of operations has remained stable (FAA 2013a, 2014a, 2016a, 2017, 2018, 2022). Based on this information, TNI is currently operating under capacity. Air taxi and commuter flights account for most aircraft operations, with Star Marianas Air providing daily scheduled passenger flights between Saipan and Tinian.

There are no regularly scheduled international flights into TNI. International travelers to Tinian are routed through Saipan International Airport for customs services and then use local air transport such as Star Marianas. Any flight of international origin intending to use TNI requires advance arrangements with the Chief of Immigration on Saipan.

The FAA publishes Area Notices that contain preferred Visual Flight Rule routings between Saipan and Tinian based on trade wind conditions (FAA 2023). No other published flight routes between Tinian and Saipan are available. Pilots transiting between Tinian and Saipan airports fly using the preferred Visual Flight Rule on flight routes similar to the notional ones depicted in Figure 3.7-2, although flight paths are often modified based on conditions. These flights use two primary visual reference points, the 8th Avenue Traffic Circle and the Broadway Traffic Circle, which route the flights directly over the Military Lease Area. There are two published flight routes within proximity to Tinian (A221 and W21).

The military uses TNI in accordance with the 1999 Lease Agreement and FAA grant assurances. These existing agreements and protocols require the military to coordinate and obtain approval by the Commonwealth Ports Authority and the FAA (DON 2013a). During military training events, helicopter operations within the Military Lease Area are required to maintain a minimum altitude of 1,000 feet above ground level when operating over Lake Hagoi and are prohibited from flying over the Mahalang and Bateha sites (DON 2013a). As a part of current training events on Tinian, temporary time slots for the exclusive use of the TNI by the military are prearranged.



3.7.3.2 North Field

North Field is a former World War II-era airfield. This airfield is the core of the North Field National Historic Landmark and is located in the northern portion of the Military Lease Area. There are no published approaches. This airfield is presently used for expeditionary airfield training events. The roads around North Field have been improved recently as part of an effort from the U.S. Air Force to clear and re-establish the runways, taxiways and surrounding roads.

3.7.3.3 Airspace

All airspace surrounding Tinian is within the FAA's Guam Combined Center/Radar Approach Control Flight Information Region. For Tinian and Saipan airports, Guam Combined Center/Radar Approach Control provides Air Traffic Control services at altitudes above 3,500 feet mean sea level. Saipan Air Traffic Control manages the local airspace between 2,000 and 3,500 feet mean sea level and international aircraft enroute to and from Saipan International Airport that is below 3,500 feet. Air Traffic Control services are not available below 2,000 feet mean sea level for aircraft flying in the local area or arriving at and departing from TNI.

Approaches, departures, and training events at North Field are all within Saipan International Airport's airspace, and military aircraft operating at North Field are required to maintain radio communication with Saipan Air Traffic Control and follow Air Traffic Control direction as needed to deconflict air traffic. The instrument landing systems approach for Saipan International Airport overlies North Field and the Multi-Purpose Maneuver Range.

3.8 Noise

An area's existing sound environment, referred to as an "ambient soundscape," includes everything that is normally audible, both natural (e.g., bird song, waves, wind in the trees) and human-made (e.g., vehicles on roads, aircraft, farm equipment). Tinian's ambient soundscape is typical to a small island in the Pacific, but with the addition of aircraft noise from TNI, and periodic military training events that use ground equipment and land aircraft at North Field. Thus, the ambient noise levels on Tinian vary by location, from very quiet, undeveloped natural areas with limited intrusions from human activity to moderately noisy or occasionally loud industrial noise environments where aircraft or heavy machinery operate regularly. The soundscape of the uninhabited inland area is dominated by natural sounds, such as wind rustling through the vegetation and trees, birds and wildlife, and livestock grazing. Areas near the island's coast are characterized by natural sounds of the waves, coastal winds, birds, and wildlife. Human-made noise in coastal areas is produced by people utilizing the beaches for gatherings and picnics. Recreational and commercial boating activity occurs at the Port of Tinian, located south of San Jose. Road noise is primarily generated by vehicles on Broadway and 8th Avenue that connect the residential areas of San Jose, Marpo Heights, and Carolinas Heights to the Military Lease Area north of TNI. Each roadway averages less than 2,220 trips per day (CNMI Department of Public Works 2022). Traffic volumes this low contribute very little to the noise environment.

Humans perceive sound based on its physical characteristics. The intensity of the sound is perceived as sound volume and is measured in decibels (written as the unit "dB"). Sound intensity varies widely, from a barely perceptible soft whisper to uncomfortable or painfully loud sounds. Human hearing ranges up to 120 decibels, at which point sound causes physical discomfort. For