



**LONG RANGE TRANSPORTATION  
PLAN [2018 – 2023]**

**TWIN HILLS VILLAGE**

**TRIBAL TRANSPORTATION PROGRAM**

**Bristol Project No. 32180038**

**Adopted March 15, 2018**

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**ACRONYMS AND ABBREVIATIONS**

ADT	Average Daily Traffic
ARRA	American Recovery and Reinvestment Act
ATV	All-Terrain Vehicle
AVEC	Alaska Village Electric Corporation
BBNA	Bristol Bay Native Association
BIA	Bureau of Indian Affairs
CFR	Code of Federal Regulations
Consortium	BBNA Tribal Transportation Program
DCCED	State of Alaska, Department of Commerce, Community and Economic Development
DEC	State of Alaska Department of Environmental Conservation
DOT	U.S. Department of Transportation
DOT&PF	Alaska Department of Transportation and Public Facilities
FAST Act	Fixing America’s Surface Transportation Act
FHWA	Federal Highway Administration
FLH	Federal Lands Highways
FTA	Federal Transit Administration
FY	Fiscal Year
HUD	U.S. Department of Housing and Urban Development
IRR	Indian Reservation Roads
kWh	Kilowatt Hour
LRTP	Long Range Transportation Plan
mi	Mile
NAHASDA	Native American Housing Assistance and Self-Determination Act
NEPA	National Environmental Policy Act (of 1969)
NTTFI	National Tribal Transportation Facility Inventory
PCE	Power Cost Equalization
PHS	U.S. Public Health Service
Refuge	Togiak National Wildlife Refuge
RIFDS	Road Inventory Field Data System
ROW	Right-of-Way
RTAP	Rural Transportation Assistance Program

STIP	Statewide Transportation Improvements Program
TIGER	Transportation Investment Generating Economic Recovery
THVC	Twin Hills Village Council
Tribe	Twin Hills Village
TTIP	Tribal Transportation Improvement Plan
TTP	Tribal Transportation Program
UUI	United Utilities Incorporated



## **EXECUTIVE SUMMARY**

This Long Range Transportation Plan (LRTP) was developed in accordance with 25 Code of Federal Regulations (CFR) Part 170. Bristol Engineering Services Corporation was contracted by Bristol Bay Native Association (BBNA) to develop the LRTP on behalf of the Twin Hills Village (Tribe).

The Tribe is part of the BBNA Tribal Transportation Program Consortium (Consortium). As a result, most tribal transportation projects in Twin Hills will be funded with tribal shares from the Tribal Transportation Program (TTP) funds through the Consortium. On average between fiscal year (FY) 2016 and 2020, the Tribe's annual tribal shares are approximately \$73,528. Other potential funding sources include the Denali Commission, Alaska Department of Transportation and Public Facilities (DOT&PF), and other federal grant programs.

This plan contains current community information, current transportation facilities, funding sources, which serve as a guide for planning and budgeting of future transportation improvements, public involvement, and tribal priorities. Additionally, it provides a listing of existing National Tribal Transportation Facility Inventory (NTTFI), routes to be amended, and routes to be added to the NTTFI for FY 2018. Below is a list of routes identified by the community and the Twin Hills Village Council (THVC) to be added to the NTTFI as part of this LRTP update.

- Landfill Road – Route 1015 Section 10 (0.1 miles)
- Church Road – Route 1016 Section 10 (0.1 miles)
- Boat Landing – Route 1017 Section 10 (0.0 miles)
- Unnamed Trail – Route 1018 Section 10 (0.1 miles)
- Unnamed Trail – Route 1019 Section 10 (0.6 miles)
- Unnamed Trail – Route 1020 Section 10 (0.2 miles)
- Unnamed Trail – Route 1021 Section 10 (0.4 miles)

- Unnamed Trail – Route 1022 Section 10 (2.6 miles)
- Unnamed Trail – Route 1023 Section 10 (0.8 miles)
- Togiak Winter Trail – Route 1024 Section 10 (2.8 miles)
- Unnamed Trail – Route 1025 Section 10 (2.2 miles)

Most of Twin Hills’s existing roads and trails are listed in the NTTFI. The NTTFI currently consists of 14 roads and trails with a total of 24.8 miles. Below is a list of the top priority road projects identified by the THVC.

- Improve road surface and drainage structures on Aurora Street (R1006 Section 10) – This route is a main road in Twin Hills and provides access to significant buildings and resources.
- Improve road surface, drainage structures, and any additional improvements needed on Beach Road (R1013 Section 10) – This route is a main road and provides access to the airport. This road will also provide access to the new landfill.
- Construct and maintain Landfill Road (R1015 Section 10) – This route will provide access to the new landfill.
- Improve road surface and drainage structures on the following routes below. – These routes are main roads in Twin Hills.
  - Northern Lights Avenue (R1002 Section 10)
  - Sharp Street (R1003 Section 10)
  - Salmon Street (R1004 Section 10)
  - Twin Hills Road (R1005 Sections 10 and 20)
  - Unnamed Road (R1007 Section 10)
  - Church Road (R1008 Section 10)

Deficiencies in transportation facilities were identified through a public involvement process and meetings with the Council. To address these needs, improvement projects were selected and prioritized through Council meetings and a public involvement process. These projects are multimodal, and involve various activities including economic development, safety, planning, maintenance, or rehabilitation. The following priorities were identified by THVC.

- Construct Landfill Road (R1015/10).
- Install community street lights.
- Resurface and build up roads as well as improve and replace drainage structures along transportation facilities.
- Acquire new maintenance equipment for the community to better construct and maintain roads.
- Continue to plan and update the Tribe's transportation needs, including continued participation in the TTP. Continue to seek additional funding sources.
- Continue maintenance activities on routes listed in the NTTFI.

In addition to the uses above, the LRTP will be used as guidance to develop the Tribal Transportation Improvement Program (TTIP).

This LRTP is a living document that will be reviewed at least once per year and updated at least every five years (25 CFR § 170.414). These reviews provide a timeframe to continually monitor the performance of the transportation system within Twin Hills, track progress of improvements, and identify additional areas of improvement.



## **1.0 MISSION STATEMENT**

It is the goal of the Twin Hills Village Council (THVC) to design, operate, plan, construct, improve, and maintain safe transportation systems for the benefit of the Tribal members and general traveling public, in the community of Twin Hills, Alaska. The community of Twin Hills is constantly striving to update and improve its transportation system. The THVC also works with the Tribal membership to identify the highest priority needs to address with the Tribal Transportation Program (TTP) for the Tribal shares it receives. The program can be used in conjunction with other available funding sources to improve access for the community residents to critical health and safety facilities, as well as points of commerce and to connect with larger transportation systems.

Twin Hills is a member of the Bristol Bay Native Association (BBNA) Tribal Transportation Program (Consortium) under the direction of BBNA's Transportation and Infrastructure Development program. BBNA's Mission is to maintain and promote a strong regional organization supported by the Tribes of Bristol Bay to serve as a unified voice to provide social, economic, cultural, educational opportunities and initiatives to benefit the Tribes and Native people of Bristol Bay. The programs Vision is to support sustainable and thriving Member communities by maximizing economic returns on policies that Promote Safety, Transportation and Infrastructure Investments, and Emergency Planning that bring lasting and equitable economic benefits to the citizens of the Bristol Bay Region. In support of BBNA's mission the Department of Transportation and Infrastructure Development is dedicated to developing safe and reliable public transportation and Infrastructure networks as well as highway safety and emergency preparedness programs within the Bristol Bay Region. The purpose of the Department is to continue to improve the quality of life for Bristol Bay Region Tribes, by developing safe reliable roads and trails, public transportation systems, infrastructure development,

highway safety planning, and emergency preparedness programs together with the most local economic benefit possible.

## **2.0 COMMUNITY OVERVIEW AND HISTORY**

The following section provides background information about the community of Twin Hills. Various elements of the community must be considered for transportation planning. These elements include the location and setting, history and culture, local economy, regional climate, soils and topography, vegetation and wildlife, and existing infrastructure. The data summarized and collected in this section helps identify potential social, economic, and environmental impacts, limitations of transportation planning, and the availability of resources for future construction of proposed transportation projects in Twin Hills.

### **2.1 LOCATION AND SETTING**

**Twin Hills is located near the mouth of the Twin Hills River, a tributary of the Togiak River, 386 miles southwest of Anchorage, see**

Figure 1. It lies at approximately 59.0751° North Latitude and 160.2806° West Longitude. Twin Hills is located in the Bristol Bay Recording District (DCCED, 2017). The community is located within the Togiak National Wildlife Refuge (Refuge). The Refuge is managed by the U.S. Fish and Wildlife Service (NOAA, 2013).



## **2.3 ECONOMY**

The economy is an important consideration for transportation planning. This planning will consider the potential impacts to the economy. These impacts include cost of living, local industries, resources and essential services, human health, and low income and minority groups.

According to State of Alaska, Department of Commerce, Community and Economic Development (DCCED) in 2016 a population of 83 was identified but breakdowns were not provided, however, breakdowns were provided for the 2010 Census. According to the 2010 Census, Twin Hills has a population of 74 people, of which 94.59% are American Indian and Alaska Native, 2.70% White, and 2.70% are two or more races. Of the 29 households the average household size is three (DCCED, 2017).

Twin Hills is a traditional Yup'ik Eskimo village with a fishing and subsistence lifestyle. In 2016, approximately 70% of residents were employed and 33.70% were below the poverty level. The largest industries in the community are the local government (75.7% of the workers), and manufacturing (13.5% of the workers). The remaining workers work in the following industries: education and health services, and state government. The average per capita income in the community is \$11,809, while the median household income is \$31,250, and the median family income is \$32,500 (DCCED, 2017).

Fuel is an important resource for residents in Twin Hills and impacts the residents' cost of living. As of July 2017 gasoline is approximately \$5.00 per gallon, heating fuel is \$5.00 per gallon, and propane is \$2.50 per pound (DCCED, 2017).

## **2.4 CLIMATE**

The climate can have a significant impact on transportation projects in Twin Hills. Proposed transportation projects will consider the impacts of weather and daylight

restricted construction seasons, precipitation and floodplain data for drainage requirements, seasonal access to transportation facilities, and impacts of construction on permafrost.

Twin Hills falls within the transitional climate zone, characterized by tundra interspersed with boreal forests, and weather patterns of long, cold winters and shorter, warm summers. Fog and high winds are prevalent during winter months. The Togiak River is ice-free from June through mid-November (DCCED, 2017). Precipitation ranges from 20 to 26 inches annually. The average winter temperatures range from 4 to 30 °F, and the average summer temperatures range from 37 to 66 °F (NOAA, 2013).

Twin Hills residents observe changes in the climate that impact the transportation system in Twin Hills. Erosion is occurring at increased rates. The waters surround the community are not freezing until later in the year making the community vulnerable from the early winter storms. Later freezing times and decreases in the amount of annual snowfall force residents to use trucks and ATVs for longer periods, as opposed to snow machines, which increases the maintenance needs of the roadways. Constant upgrades to the multimodal transportation system is needed as these environmental changes continue to take place.

## **2.5 SOILS AND TOPOGRAPHY**

The local soil and topographic conditions will be considered in the transportation planning process. Twin Hills lies within the Bristol Bay lowland along the Twin Hills River. The lowland is a moraine and outwash plain that rises from sea level to about 500 feet. This lowland is bounded by the Aleutian Range to the southeast and the Ahklun Mountains to the northwest. The area soils generally consist of gravelly glacial material covered with volcanic ash then topped with a layer of newly formed organics (Twin Hills Village Council, 2001).

The local soils are predominantly organic overlaying wet silt, which is a very frost susceptible combination. However, the community is located on a river gravel deposit. Twin Hills lies within an area of discontinuous permafrost.

## **2.6 VEGETATION AND WILDLIFE**

It is important to consider the potential impacts on the local vegetation and wildlife for any proposed transportation project. The Refuge has more than 500 kinds of plants that grow in fresh and saltwater wetlands, open water, mountains, meadows, tundra, and forests that include cottonwood, spruce, grasses, and low growing shrubs. The coastline varies from sandy beaches to rugged, lichen-covered cliffs (FWS, 2017).

The Refuge is home to an abundance of terrestrial and marine mammals. The terrestrial mammals include moose, wolves, brown bear, caribou, and many smaller mammals. The marine mammals along the coastline include walrus, Steller's sea lion, harbor and spotted seals, baleen whales, dolphins, porpoises, and toothed whales (FWS, 2017).

The Refuge habitats hundreds of bird species that stage, migrate, or breed in the area. There are also birds that stay year round, such as the bald eagle, common raven, northern hawk owl, and willow ptarmigan (FWS, 2017).

The Refuge is a prime habitat for several fish species, such as Rainbow trout, Arctic grayling, Arctic char, Dolly Varden, and salmon (FWS, 2017).

## **2.7 INFRASTRUCTURE**

Proposed transportation projects, for Twin Hills, will consider the impacts to the existing modes of transportation, facilities, utilities, landfills, and material sources within the community.

### **2.7.1 Transportation**

When planning future transportation projects, it is important to consider the communities current modes of transportation. The THVC is conscientious when planning future transportation projects that will help reduce the cost of energy to the residents within the community. These transportation systems are planned out to conserve the amount of time and energy required to get to and from main points of the community, mainly the points at which the community meet, conduct business, and have health and safety resources.

Twin Hills is a multimodal community. Residents use private boats on nearby waterways for transportation to surrounding communities and subsistence areas, however, air transport is the most frequent means of getting to and from Twin Hills. Trucks, cars, all-terrain vehicles (ATVs), and foot travel are year round modes of transportation on roads and trail, in addition to snow machines during the winter months.

### **2.7.2 Facilities**

The impact on existing public facilities will be considered in the transportation process. These proposed transportation projects will help improve access to residential, educational, and health and safety facilities for the community residents. Some of the important facilities for the public to access are Twin Hills Airport, Julius Pleasant Health Center, Twin Hills School, and other community meeting places.

### **2.7.3 Utilities**

Coordination with utility companies is an important part of the transportation planning process. A brief summary of the existing utilities in Twin Hills is included in the following section (DCCED, 2017).

- Electricity – Twin Hills Village provides power for the community through the use of a diesel generator at a cost of \$0.54 per kilowatt hour (kWh) to the residents after the power cost equalization (PCE) has been applied.

- Fuel – Twin Hills Village owns and maintains two 25, 000 gallon diesel tanks, one 1,200 gallon diesel tank, one 1,000 gallon diesel tank, one 6,000 gallon gasoline tank, three 1,200 gallon propane tanks, and two 1, 000 gallon propane tanks.
- Sewer – U.S. Public Health Service (PHS) installed a sewer system which consists of 4 and 6 inch collection lines which gravity feed to a sewage lagoon.
- Telecommunications – United Utilities Incorporated (UUI) provides landline telephone and internet service, GCI provides cellphone service.
- Water – Twin Hills Water System is owned by Twin Hills Village. The State of Alaska Department of Environmental Conservation (DEC) Drinking Water Program classifies this system as a community public water system which is served by a ground water source. It serves a population of 83.

#### **2.7.4 Landfills**

Twin Hills Landfill is operated by Twin Hills Village (Tribe). It is a non-permitted Class III landfill.

#### **2.7.5 Material Sources**

Twin Hills has no commercially available material sources at this time.

### **3.0 EXISTING TRANSPORTATION SYSTEMS**

To better understand areas of needed improvements, high priority areas of concern, and deficiencies the existing conditions of the Twin Hills transportation system were identified. All modes of transportation were considered including aviation facilities, coastal and river transportation, pedestrian and public transportation, and roadways.

#### **3.1 EXISTING AVIATION FACILITIES**

Aviation connects Twin Hills to the rest of the state, like many communities in Alaska, due to the lack of interconnecting roads. Twin Hills Airport is owned by Alaska Department of Transportation and Public Facilities (DOT&PF) and managed out of the Central Region office. It is a gravel airstrip that is 3,000 feet long and 60 feet wide located on the ridge east of the community. Regular and chartered flights are dispatched from

Dillingham. Services are provided by Grant Aviation, Alaska Island Air, Coopchiak Air, Bristol Bay Air, and others. The community receives most of their cargo from air transportation (DCCED, 2017).

### **3.2 EXISTING COASTAL AND RIVER TRANSPORTATION**

Twin Hills has a boat landing area but does not have a docking facility. Any bulk goods arriving by barge must be lightered to shore (DCCED, 2017).

### **3.3 EXISTING PEDESTRIAN AND PUBLIC TRANSPORTATION**

Twin Hills has a community van. This van is used by the health aid, and to take residents to and from the airport. The health aid has top priority of the use of the van.

### **3.4 EXISTING ROADWAYS**

An important aspect to roadway planning is an accurate traffic count. Traffic circulation in the community mainly involves trips to residences and the other facilities listed in Section 2.7.2. Average Daily Traffic (ADT) is based on either direct traffic counts or default counts determined by the class of the particular road. Due to the small population and financial constraints no traffic count was gathered. For planning purposes all routes will have the default of 50 ADT, unless otherwise noted.

Twin Hills currently has 24.8 miles of official roads in the National Tribal Transportation Facility Inventory (NTTFI). These gravel roads and trails provide access to important points in the community, residences, and local subsistence areas.

These gravel roads are deteriorated and have many potholes which produce health and safety risks to the residents. These potholes also decrease the longevity of the equipment that maintain the facilities and roads. Drainage features such as culverts can also be found along some of the existing roads. Many of these culverts are crushed or plugged due to the

erosion in the community. These non-functioning culverts cause ponding which is a health and safety hazard for residents and if left can cause further road deterioration.

#### 4.0 CURRENT TTP INVENTORY

The current routes, listed in the official NTTFI, are listed in Table 1 below. See Appendix A for an official NTTFI report accessed from Road Inventory Field Data System (RIFDS) on February 13, 2018 of the THVC inventory and the RIFDS Lookup Report for codes. Also, see Figures 2 and 3 for the Official Inventory / 2018 Inventory Addition maps.

**Table 1: Twin Hills Official NTTFI**

Route Name	Route No.	Section No.	Length (mi)
Northern Lights Avenue	1002	10	0.2
Sharp Street	1003	10	0.1
Salmon Street	1004	10	0.1
Twin Hills Road	1005	10	0.1
Twin Hills Road	1005	20	0.2
Twin Hills Road <sup>1</sup>	1005	30	0.2
Aurora Street	1006	10	0.4
Unnamed Road	1007	10	0.2
Unnamed Road	1008	10	0.3
Unnamed Road	1009	10	0.1
Loon Street <sup>1</sup>	1010	10	0.1
Landfill Road <sup>1</sup>	1011	10	3.2
Unnamed Trail	1012	10	4.3
Beach Road	1013	10	3.1
Beach Road	1013	20	1.8

**Table 1 (Cont’d): Twin Hills Official NTTFI**

Route Name	Route No.	Section No.	Length (mi)
Togiak River Access Trail	1014	10	0.2
Togiak River Access Trail (Bridge No. <i>NEW1AA LIVAAK</i> ) <sup>2</sup>	1014	20	100 <sup>2</sup>
Togiak River Access Trail	1014	30	2.1
Togiak River Access Trail (Bridge No. <i>NEW2AA LIVAAK</i> ) <sup>2</sup>	1014	40	75 <sup>2</sup>
Togiak River Access Trail	1014	50	1.1
Airport Road	1THL	10	7.0

**TOTAL MILES 24.8**

<sup>1</sup> Proposed Road

<sup>2</sup> Bridge length measured in feet (ft), does not add to overall mileage

## 5.0 TTP INVENTORY UPDATES

The following sections reflect amendments to existing inventory, additions, and deletions to the TTP inventory.

### 5.1 INVENTORY AMENDMENTS TO EXISTING INVENTORY

Below is a list of official NTTFI routes that will have amendments applied in order to update the NTTFI to the current conditions, see Appendix B for changes. The information in Appendix B will reflect the changes from the current official NTTFI. These route amendments were identified during the initial site visit on October 26, 2017.

- Twin Hills Road – Route 1005 Section 30 and 40

#### 5.1.1 Twin Hills Road –Route 1005

Route 1005 is an approximately 0.5 mile long existing and proposed road. The THVC and community have identified section 30 to be amended from the previous NTTFI status.

This section is being re-sectioned to sections 30 and 40. Section 30 is a graded and drained

earth road and has a 60-foot right-of-way. This section provides access to new homes which are part of the U.S. Department of Housing and Urban Development (HUD) housing community. Section 40 is a proposed road that will provide access to the remaining portion of the HUD housing community, as well as support the continued effort to install power and sewer to the remaining HUD housing community.

See Appendix B for route amendments.

## 5.2 INVENTORY ADDITIONS

The following table, Table 2, lists routes that are proposed to be added to the NTTFI. These routes were identified during the initial site visit on October 26, 2017 and during the public meeting on January 24, 2018.

**Table 2: NTTFI Additions**

Route Name	Route No.	Section No.	Length (mi)
Landfill Road	1015	10	0.1
Church Road	1016	10	0.1
Boat Landing	1017	10	0.0
Unnamed Trail	1018	10	0.1
Unnamed Trail	1019	10	0.6
Unnamed Trail	1020	10	0.2
Unnamed Trail	1021	10	0.4
Unnamed Trail	1022	10	2.6
Unnamed Trail	1023	10	0.8
Togiak Winter Trail	1024	10	2.8
Unnamed Trail	1025	10	2.2

### **5.2.1 Landfill Road –Route 1015**

Route 1015 is approximately 0.1 miles long and is a proposed road. The THVC and community have identified the proposed route be added to the NTTFI. This route leads south east off of Beach Road (R1013/10). It provides access to the community landfill.

See Appendix C for the route packet.

### **5.2.2 Church Road –Route 1016**

Route 1016 is approximately 0.1 miles long and is an existing road. The THVC and community have identified the existing road to be added to the NTTFI. This road is minimally built up gravel road located off of Beach Road (R1013/10). It continues west to the Twin Hills community church.

See Appendix C for the route packet.

### **5.2.3 Boat Landing –Route 1017**

Facility 1017 is located at the end of Unnamed Road (R1009/10). It has a gravel embankment and has space for boat storage. This facility provides boat access to the East Channel Togiak River (Twin Hills River) and also provides the fuel tug access. Facility 1017 is classified as Class 9.

See Appendix C for the route packet.

### **5.2.4 Unnamed Trail –Route 1018**

Route 1018 is approximately 0.1 miles long and is an existing trail. The THVC and community have identified the existing trail to be added to the NTTFI. This is a primitive two track trail that leads to the East Channel Togiak River (Twin Hills River) off of the south west corner of the sewage lagoon. This trail is used as an additional access point to

the river when the boat landing is too crowded, and for collecting eggs and other subsistence purposes.

See Appendix C for the route packet.

#### **5.2.5 Unnamed Trail –Route 1019**

Route 1019 is approximately 0.6 miles long and is an existing trail. The THVC and community have identified the existing trail to be added to the NTTFI. This is a primitive two track trail that leads south east off of Beach Road (R1013/10). This trail is used for subsistence purposes such as hunting and berry picking.

See Appendix C for the route packet.

#### **5.2.6 Unnamed Trail –Route 1020**

Route 1020 is approximately 0.2 miles long and is an existing trail. The THVC and community have identified the existing trail to be added to the NTTFI. This is a primitive two track trail that leads west, down to the East Channel Togiak River (Twin Hills River), off of Beach Road (R1013/10). This trail is used for subsistence purposes such as berry picking, and goose hunting.

See Appendix C for the route packet.

#### **5.2.7 Unnamed Trail –Route 1021**

Route 1021 is approximately 0.4 miles long and is an existing trail. The THVC and community have identified the existing trail to be added to the NTTFI. This is a primitive two track trail that leads west, down to the East Channel Togiak River (Twin Hills River), off of Beach Road (R1013/10). This trail is used for subsistence purposes such as berry picking, collecting seagull eggs, and goose and duck hunting.

See Appendix C for the route packet.

**5.2.8 Unnamed Trail – Route 1022**

Route 1022 is approximately 2.6 miles long and is an existing trail. The THVC and community have identified the existing trail to be added to the NTTFI. This is a primitive two track trail that starts at the Boat Landing (R1017/10) and leads south along the East Channel Togiak River (Twin Hills River). This trail is used for subsistence purposes such as berry picking, goose and duck hunting, and collecting seagull eggs.

See Appendix C for the route packet.

**5.2.9 Unnamed Trail – Route 1023**

Route 1023 is approximately 0.8 miles long and is an existing trail. The THVC and community have identified the existing trail to be added to the NTTFI. This is a primitive two track trail that starts at Beach Road (R1013/10) and leads east to a nearby lake. This trail is used for subsistence purposes such as berry picking and pike fishing in the lake.

See Appendix C for route packet.

**5.2.10 Togiak Winter Trail – Route 1024**

Route 1024 is approximately 2.8 miles long and is an existing trail. The THVC and community have identified the existing trail to be added to the NTTFI. This is a primitive two track trail that starts at the end of Togiak River Access Trail (R1014/20) and continues west to Togiak. This trail is used for subsistence purposes and to connect Twin Hills to Togiak.

See Appendix C for route packet.

**5.2.11 Unnamed Trail – Route 1025**

Route 1025 is approximately 2.2 miles long and is an existing trail. The THVC and community have identified the existing trail to be added to the NTTFI. This is a primitive

two track trail that starts at Beach Road (R1013/10) and continues north. This trail is used for subsistence purposes.

See Appendix C for route packet.

### **5.3 INVENTORY DELETIONS**

No deletions are occurring as part of this LRTP.

### **6.0 PUBLIC INVOLVEMENT**

A key aspect to the development of this plan is public involvement, and is also required by the United States Code of Federal Regulations (CFR) to assist in the decision making process. Public involvement is used as an opportunity to identify the community's issues and concerns, establish consensus, and capture their transportation values and perceived needs. Strategies utilized by the Tribe to solicit public involvement included THVC coordination, stakeholder coordination, public surveys, and public meetings.

Public comments were solicited during development of Twin Hills 2018 LRTP. The transportation priorities and issues identified by some of the community members during the initial site visit on October 26, 2017, and during the public meeting on January 24, 2018 are listed below.

- New maintenance equipment for example a rock crusher, compactor, and grader. Additionally there is a need for a supply of a higher quality gravel for projects.
- Community street lights.
- Resurface and build up roads to help minimize potholes.
- Maintain trails and tripods along the trails. Add safety shelters along the trails.
- Clear brush to reduce blinds spots within community.
- Install and maintain channel markers for the barges. As well as potentially locate a new dock for barges further down river.
- Plan and design an evacuation road.

- Construction of the landfill and Landfill Road.
- Design and construction of a bridge at R1014/20 for access to Togiak.
- Plan and implement a dust control method.

Additional information collected at the public meeting as well as other public involvement documentation is included in Appendix D.

## **7.0 TRIBAL PRIORITY LIST**

Twin Hills is a part of the Consortium. The Consortium works as an organization of Tribes. The Consortium works on Tribal Priorities on behalf of each Tribe's Transportation Program. The Tribes in the Consortium collaborate and reach collective agreements to plan how these priorities will be accomplished for each participating Tribe. The plan is focused on improved access to lands and use, housing development, economic development, access for law enforcement, access to healthcare, safe routes to school, environmental improvement, and providing residents with a healthy environment. Using this plan the Consortium develops a collective Tribal Transportation Improvement Plan (TTIP) of doable projects within a five year time frame.

### **7.1 TRIBAL PRIORITY LIST FISCAL YEAR 2018 - 2023**

The THVC and community members identified the priorities below in an effort to continue the growth of their community.

- Construct Landfill Road (R1015/10).
- Install community street lights.
- Resurface and build up roads as well as improve and replace drainage structures along transportation facilities.
- Acquire new maintenance equipment for the community to better construct and maintain roads.
- Continue to plan and update the Tribe's transportation needs, including continued participation in the TTP. Continue to seek additional funding sources.

- Continue maintenance activities on routes listed in the NTTFI.

It is understood that these priorities are subject to change based on available funding, personnel, and current situations. Any arising situation involving the road system can change these priorities. See Appendix E for the Tribal Priority List.

## **8.0 PROJECT DEVELOPMENT**

As projects evolve, as a result of this program, they will take into consideration measures that address health and safety concerns, and economic development relating to transportation improvements. This can be done by following the National Environmental Policy Act (NEPA) guidelines, the latest version of the Tribal Transportation Delivery Guide and other reference material identified and outlined during the NEPA and Project Development phases of the project. Additionally, project development benefits from the involvement, from beginning to end, of other regional entities such as Federal Highway Administration (FHWA), Federal Lands Highways (FLH), and the DOT&PF.

Funding is considered throughout the process of developing each project. The Tribes associated in the Consortium authorized the Consortium to negotiate and execute an agreement to receive funding, manage, and carry out the program functions, services, and activities associated with the TTP on behalf of its member Tribes.

## **9.0 FINANCING**

The funding/financing section presents potential funding options for transportation improvement projects, and a plan for re-assessment of identified improvements based upon financial constraints.

## **9.1 FUNDING SOURCES**

The vast majority of funding for transportation projects arises from federal highway acts, which are authorized by Congress and determine transportation policy and spending levels for a set period of time. These acts determine funding for Bureau of Indian Affairs (BIA) Transportation, Federal Highway Administration (FHWA), individual states, and Tribal Shares. At this time the primary governing highway act is the Fixing America's Surface Transportation Act (FAST Act). On December 4, 2015, President Obama signed the FAST Act (PL No. 114-94) into law. The FAST Act authorizes \$305 billion over fiscal years (FY) 2016 to 2020 for highway, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, research, technology, and statistic programs.

This section discusses potential funding sources for Twin Hills prioritized transportation projects, types of projects eligible for funding, and the funding process for each funding agency. Potential transportation funding sources include funds from the BIA TTP, DOT&PF, Public Lands Highway, Scenic Byways, the Denali Commission, and the Transportation Investment Generating Economic Recovery (TIGER) Grant, among others, as explained in further detail below.

### **9.1.1 Tribal Transportation Program**

The Tribe's primary transportation funding source is the TTP. The program is receiving \$465 million in fiscal year 2016 with increases of \$10 million per year to \$505 million in fiscal year 2020, as established by the FAST Act to address transportation needs of Tribal governments throughout the United States. The purpose of the TTP is to provide safe and adequate transportation and public road access to and within Indian reservations, Indian lands, and Alaska Native Village communities.

The TTP is funded by contract authority from the Highway Trust Fund and is subject to the overall Federal-aid obligation limitation. TTP funds, also known as “tribal shares,” are a single annual lump sum payment, subject to the availability of funding, allocated among Tribes using a statutory formula, as outlined in the FAST Act. The formula is briefly described below, per 25 CFR 170.201:

- *27 Percent* – Ratio of the Tribe’s total eligible miles to the total eligible road mileage of all American Indians and Alaskan Natives. Eligible road mileage is computed using only facilities included in the inventory described below.
  - Were included in the BIA System Inventory prior to October 1, 2004;
  - Are owned by an Indian Tribal Government;
  - Are owned by the BIA.
- *39 Percent* – Ratio of the Tribe’s total population to the total population of all American Indians and Alaskan Natives, as computed under the Native American Housing Assistance and Self-Determination Act of 1996 (NAHASDA); and
- *34 Percent* – Initially divided equally among each BIA region. The share of funds will be distributed to each Indian Tribe within the BIA region based on the ratio of the average total relative need distribution factors and population adjustment factors from fiscal years 2005 through 2011 for a Tribe to that of the region.

This funding formula will remain in effect through FY 2020, and may be subject to change thereafter. The estimated tribal shares for Twin Hills through fiscal year 2020 are listed below in Table 3 (Estimated Tribal Shares from FAST Act (FY16 – FY20), 2015).

**Table 3: Twin Hills Estimated Tribal Shares**

<b>Fiscal Year</b>	<b>FY16</b>	<b>FY17</b>	<b>FY18</b>	<b>FY19</b>	<b>FY20</b>
Estimated Tribal Shares	\$72,204	\$72,990	\$73,660	\$74,199	\$74,589

Other programs exist under the TTP, which are funding resources available to Tribe’s for specific types of transportation improvement projects. These are listed and described briefly below. More information can be found on the TTP website.

- *Bridge Funds* – Under the FAST Act, up to 3% of TTP funds are available each year for improving deficient bridges. Federally recognized Indian tribes may submit an

application at any time for eligible tribal transportation bridges for planning, design, engineering, preconstruction, construction, and inspection, or to replace, rehabilitate, seismically retrofit, or paint. Funds may also be used for anti-icing, de-icing, or to implement countermeasures (including multiple-pipe culverts). To be eligible, a bridge must have an opening of at least 20 feet, be classified as a tribal transportation facility, and be structurally deficient or functionally obsolete.

- *Safety Funds* – Each year under the FAST Act, 2% of the available TTP funds are set aside to address transportation safety issues in Native America. Funds are available to federally recognized Indian tribes through a competitive, discretionary program. Projects are chosen whose outcomes will address the prevention and reduction of death or serious injuries in transportation related incidents, such as motor vehicle crashes. FHWA advocates the development of strategic Transportation Safety Plans as a means for tribes to determine how transportation safety needs will be addressed in and around tribal communities. Eligible projects for the TTP Safety Fund under the FAST Act include: development and revision of transportation safety plans, crash data improvement, road safety audits, and other activities, primarily infrastructure improvements, as listed in 23 U.S.C. 148(a)(4).

### **9.1.2 Alaska Department of Transportation**

The DOT&PF provides services to Alaskans and visitors by designing, constructing, operating and maintaining the state’s transportation infrastructure systems, buildings and other facilities. These included more than 5,600 miles of highway, 242 airports, 731 public facilities, and 10 ferries serving 35 communities throughout the state of Alaska. The department is divided into three regions, along with the Alaska Marine Highway System. Twin Hills Village falls within jurisdiction of the DOT&PF Central Region, Anchorage office.

There are several funding options available through the DOT&PF for transportation related projects, which are established by and subject to the FAST Act funding allocation. These are listed and described briefly below. More information can be found on the DOT&PF website.

- *STIP* – The Statewide Transportation Improvements Program (STIP) is funded by the FHWA, Federal Transit Administration (FTA), and matching funds from the

state and/or local sources. The STIP is DOT&PF's four-year program for transportation system preservation and development. The Needs List is the foundation of the STIP and includes all the air, land and water transportation projects in Alaska that have been formally proposed by residents, elected officials, and transportation professionals every four years.

- *Safe Routes to School* – Grants are available to help plan, design or complete construction improvements that enable and encourage children to safely walk and bicycle to school. Eligible recipients include state, local and regional agencies, and nonprofit organizations with a sponsor. A 20% match is required for all projects.
- *Public Transit Funding* – The State of Alaska maintains various public transit programs to aid in funding across the state. These include the Non-Urban Formula Grants, Rural Transportation Assistance Program (RTAP), American Recovery and Reinvestment Act of 2009 (ARRA) Funding Distribution, and the Tribal Transit Program Funds.

### 9.1.3 Other Funding Sources

Apart from the TTP and DOT&PF, additional funding sources are available for transportation projects, as listed and described briefly below.

- *Grants.gov* – [www.grants.gov](http://www.grants.gov) is a public website where all federal agency discretionary funding opportunities are posted for grantees to find and apply to them. The search function can be used to sort out transportation related grants. Some grant postings close after only two weeks, so it is important to check for opportunities frequently.
- *The Denali Commission* – The Denali Commission is an independent federal agency designed to provide critical utilities, infrastructure, and economic support throughout Alaska. Various funding opportunities are available through their Energy Program, Transportation Program, Health Facilities Program, and Training Program. Visit the Denali Commission website for more information.
- *TIGER Grants* – The Transportation Investment Generating Economic Recovery (TIGER) grant program is a highly competitive program through the U.S. Department of Transportation (DOT) that supports innovative road, rail, transit and port projects to improve safety and economic opportunity in the United States. Since 2009, congress has dedicated nearly \$4.6 billion for seven rounds of TIGER, and the eighth round of funding was announced in January of 2017 for nearly \$500 million. Available funding is only for construction costs and may not be used for planning, preparation or design. A minimum of 20% of funds will go to projects in rural areas.

## **9.2 FINANCIAL CONSTRAINTS**

To assist with transportation planning, cost estimates for short-term high priority projects selected during the public involvement process will be developed. Having cost estimates on hand will aid in procuring funding by showing preparedness, as well as assist the Tribe's planning efforts for future transportation projects and budget allocation.

In the event that funding falls short or requires amendment, the THVC will use the following procedure to determine the best course of action:

1. Determine the new funding requirement;
2. Evaluate current available funding;
3. Evaluate additional funding options;
4. Hold a meeting with council members to re-evaluate the transportation budget and make amendments as needed, while utilizing the priority list to ensure other priority projects stay on track;
5. Adjust the project schedule as needed, and;
6. Update the LRTP.

## **10.0 PLAN UPDATES**

This LRTP will be reviewed annually and updated at least every five years in accordance with 25 CFR 170.414. The LRTP will be amended as a result of major changes in Tribal goals, vision and mission for Twin Hills's transportation facilities, major improvement studies, projects or corridor justification studies, environmental impact studies, and projected Federal, State, and Tribal funding. Inventory will be amended or added following the guidelines outlined in 25 CFR Part 170.

## 11.0 REFERENCES

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## **FIGURES**



**APPENDIX A**

Official NTTFI



## **APPENDIX B**

### Inventory Amendments to Existing Inventory



## **APPENDIX C**

### Route Packets



## **APPENDIX D**

### Public Involvement



## **APPENDIX E**

### NTTFI Priorities



## **APPENDIX F**

### Route Resolutions