



Introduction

This transportation plan for the Seminole Nation of Oklahoma was prepared for the Nation and BIA in accordance with Section 1B of the Memorandum of Agreement (MOA) between the BIA and the FHWA, dated May 23, 1983, which requires the BIA to carry out a transportation planning process for Tribal Transportation Facilities (previously referred to as Indian Reservation Roads) deemed to be adequate to support their construction and improvement program similar to 23 U.S.C. 307, and 25 U.S.C.

The term Tribal Transportation Facility (TTF) means public roads, including roads on the federal-aid system that are located within or provide access to an Indian Reservation, Indian trust land or restricted Indian land that is not subject to fee title alienation without the approval of the federal government, or Indian and Alaskan Native villages, groups, or communities in which Indians and Alaska natives reside, whom the Secretary of the Interior has determined are eligible for services generally available to Indians under federal laws specifically applicable to Indians. This term includes all or part of the following systems:

- roads included in the Bureau of Indian Affairs system inventory prior to October 1, 2004;
- Are owned by an Indian tribal government;
- Are owned by the Bureau of Indian Affairs;
- were constructed or reconstructed with funds from the Highway Account of the Transportation Trust Fund under the Indian reservation roads program since 1983
- are public roads or bridges within the exterior boundary of Indian reservations, Alaska Native villages, and other recognized Indian communities (including communities in former Indian reservations in the State of Oklahoma) in which the majority of residents are American Indians or Alaska Natives; or
- are public roads within or providing access to an Indian reservation or Indian trust land or restricted Indian land that is not subject to fee title alienation without the approval of the Federal Government, or Indian or Alaska Native villages, groups, or communities in which Indians and Alaska Natives reside, whom the Secretary of the Interior has determined are eligible for services generally available to Indians under Federal laws specifically applicable to Indians; or
- are primary access routes proposed by tribal governments, including roads between villages, roads to landfills, roads to drinking water sources, roads to natural resources identified for economic development, and roads that provide access to intermodal terminals, such as airports, harbors, or boat landings.



Purpose and Scope

The objective of this transportation study is to produce a plan for providing transportation facilities for vehicular traffic that will enable tribal leaders to take advantage of desirable development opportunities, protect community resources and traditions, and enhance the use of the Nation's land by its residents. Specifically, the purpose of this study is to:

- Identify, evaluate and determine present and future public transportation needs.
- Provide a 20-year transportation plan, which defines those needs and is responsive to short and long range development projections.
- Develop a prioritized listing of recommended road improvement/construction projects for use by the Nation and BIA in implementing a construction program to meet current and projected (20-year) transportation needs.

This transportation plan is intended to be fiscally and developmentally sound and to address the funding issues and eligibility restrictions associated with Highway Trust Fund (HTF) monies. Each Tribe is politically and geographically diverse, and each has its own goals and objectives for a transportation system. However, because the Tribal Transportation Facility system is composed of public roads, many of which fall under BIA's, State's, County's and Cities' responsibility, several transportation issues common to all Tribes can be identified. These are:

- To provide safe and convenient public access within their boundaries.
- To provide access to new and old development.
- To complement surrounding public transportation facilities as part of the area-wide public transportation system.
- To assist in the economic development of the Nation.
- To produce a plan for providing transportation facilities for everyone in the County.



Organization of Study

The organization of this study consists of three phases:

Phase One provided for the collection of data that would be used in the analysis and development of the transportation plan.

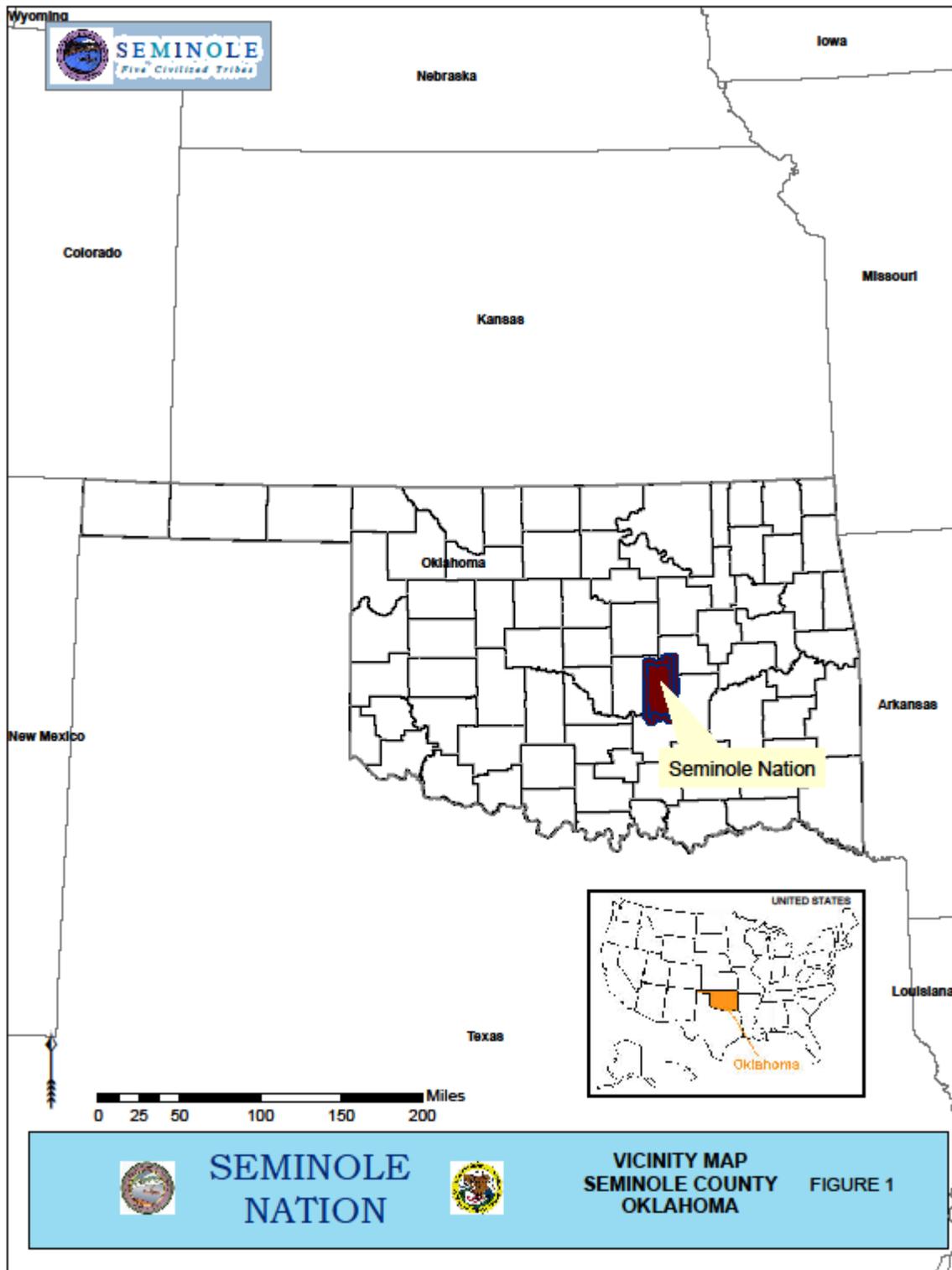
Phase Two included the major analytical work tasks of the study including both the generation of future traffic figures based upon projected land development and the development of transportation system alternatives. Dialogue and coordination with Nation, County, City and BIA officials was required to obtain a projected land use outlook needed to complete the second and third phases of this study.

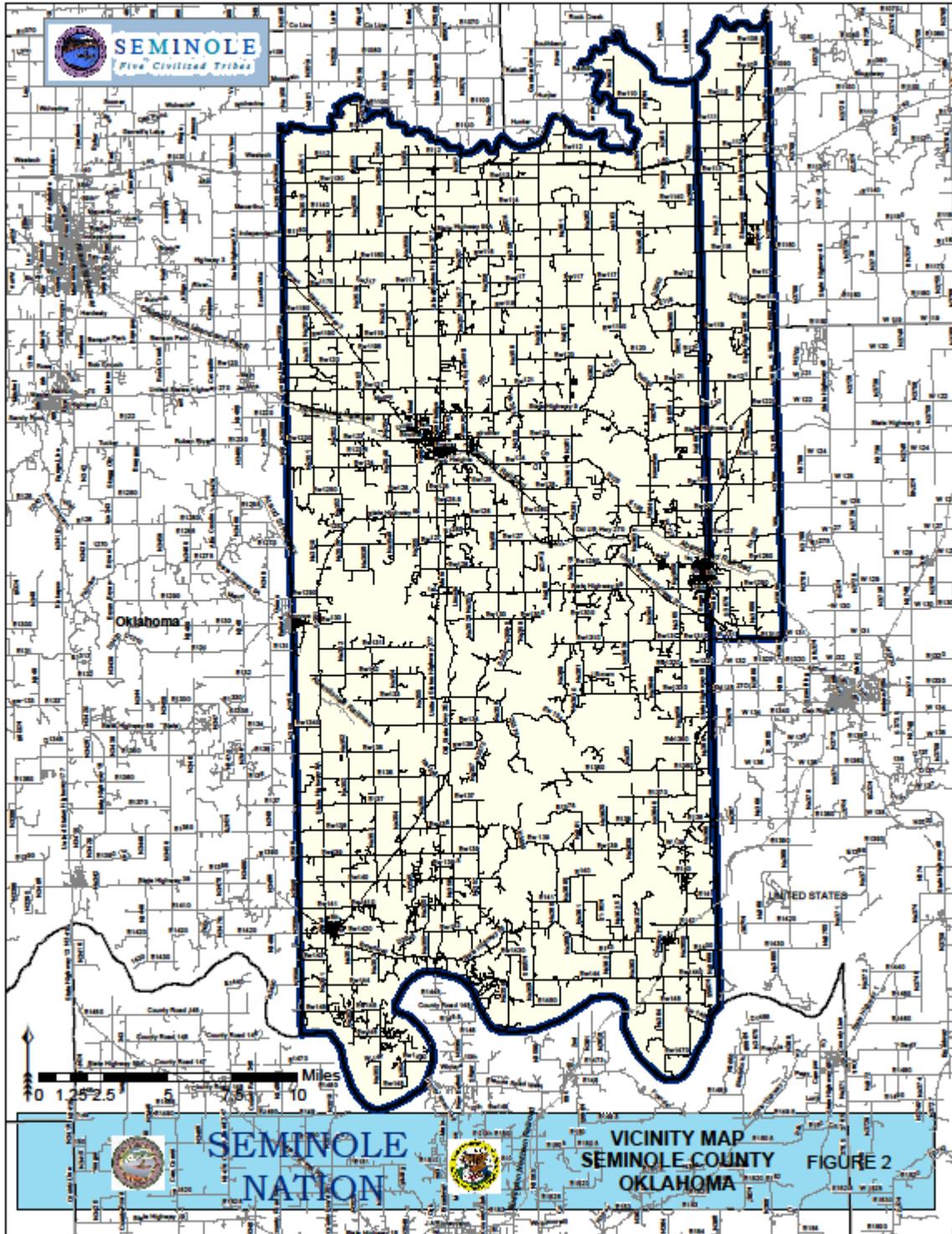
Phase Three included the preparation of the final transportation plan based on the review of the alternatives by the Nation's leaders and County, City and BIA officials. This final phase also evaluates the social and economic factors associated with the priority list of road construction projects. The results of all phases are presented herein.

During the course of this planning effort, the Seminole Nation Transportation staff conducted meetings and other sources of outreach to gather data. The staff also met with tribal officials, tribal staff and contacted other local, county and state agencies, as well as schools to obtain the most current information on socioeconomic conditions, tribal needs, development trends and traffic data. Traffic data was collected both by staff and by a consultant. From the information collected through this process, the staff prepared a "Draft" Transportation Plan. Subsequently this Final Plan is being transmitted to the Nation and BIA for review and comment. The Final Transportation Plan was submitted to the Seminole Nation Tribal General for approval. A copy of the Tribal Resolution approving the plan is contained in *Appendix A*.

Regional Context (See Figures 1 & 2)

The Seminole Nation of Oklahoma encompasses all of Seminole County in south central Oklahoma, approximately 45 miles east of Oklahoma City. Wewoka, the county seat of Seminole County is a settlement of the modern Seminole Nation. The Nation's facilities in Wewoka are accessible via north-south running Oklahoma Highway 56 and east-west running U.S. 270. I-40, connecting with Oklahoma City and beyond, passes approximately 20 miles north of Wewoka. The Seminole Nation Tribal Complex is located in the Town of Wewoka, Oklahoma. Wewoka lies at the junction of U.S. 270 and Oklahoma Highway 56, approximately 30 miles southeast of the Town of Shawnee.







Transportation Plan Summary

The transportation plan presented herein should be considered a flexible plan adaptable to the changing needs and conditions within the community. The Nation should use the plan as the basis for programming and budgeting future roadway improvement funds while recognizing that such priorities and improvement needs will change over time. Thus, the construction list must be reviewed and modified as needed on an annual basis. The overall plan must also be updated every five to seven years, or when major change in land use has developed.

The 2032 Transportation Plan recognizes the realistic need to provide better mobility in areas, as well as promoting increased opportunities for alternative modes of transportation. In order to develop the Roadway Plan by 2032, there are a large number of improvement projects that need to be implemented over the next 20 years. Based on forecast for the improvement, projects were grouped into three time periods: short range (0 to 5 years), mid range (6 to 10 years), and long range (11 to 20 years), based on their relative urgency for completion.

Current BIA road system mileage for the Seminole Nation, as approved by the Regional Director in FY 2012, consists of 984.5 miles. In accordance with the MAP-21 resolution, only 167.1 miles of the inventory are being counted as part of the funding formula.

In 2011, a traffic count on the Nation's roads was performed by TEC and the Seminole Nation Transportation Department. An earlier one was also performed by ASCG in 2007.

Funding Allocations

In 2012, Moving Ahead for Progress in the 21st Century Act (Map-21) was passed after having nine extensions of SAFETEA-LU. This bill has been approved through fiscal year 2014, at which time Congress will either extend MAP-21 or create a new bill. MAP-21 is supposed to modernize and reform the current transportation system and create jobs. The funding for MAP-21 is to stay at the same levels as SAFETEA-LU with adjustment for inflation. There was a consolidation of programs to make it easier to streamline projects and deal with less red tape. It was seen as an effective way to get projects done in a timelier and less costly manner and to give states more resources for their projects.

As of the passing of MAP-21, funding for the "Public Transportation on Indian Reservations" program is increased to \$30 million. The Secretary will distribute \$5 million competitively each fiscal year, and \$25 million will be available to Indian Tribes as formula grants to continue and expand public transportation services.

With the new bill, there will be a five year transition period in increments of 20% to adjust tribes to the new funding formula. The breakdown is as follows:

- FY12: 80% equal to the ratio of the amount allocated to each tribe for FY11 bears to the total



amount allocated to all tribes for that fiscal year. 20% of the tribal shares will be based on the new formula.

- FY13: 60% equal to the ratio of the amount allocated to each tribe for FY11 bears to the total amount allocated to all tribes for that fiscal year. 40% of the tribal shares will be based on the new formula.
- FY14: 40% equal to the ratio of the amount allocated to each tribe for FY11 bears to the total amount allocated to all tribes for that fiscal year. 60% of the tribal shares will be based on the new formula.
- FY15: 20% equal to the ratio of the amount allocated to each tribe for FY11 bears to the total amount allocated to all tribes for that fiscal year. 80% of the tribal shares will be based on the new formula.
- FY16: Funding is based 100% on the new formula.

The TTP formula is broken down into three parts. The tribal shares are computed using the National Tribal Transportation Facility inventory, as calculated for fiscal year 2012, and the most recent population data as computed under the Native American Housing and Self-Determination Act of 1996 (NAHASDA). The parts of the formula are as follows:

1. 27% in the ratio that the total eligible road mileage in each tribe bears to the total eligible road mileage of all American Indian and Alaska Natives.
2. 39% in the ratio that the total population in each tribe bears to the total population of all American Indians and Alaska Natives.
3. 34% will be equally divided among each BIA region. Within each region, the funds will be distributed to each tribe in the ration that the average total relative need distribution factors and population adjustment factors from FY2005-2011 for a tribe bears to the average total of relative need distribution factors and the population adjustment factors for FY2005-2011 in that region.

In addition, there is the tribal supplemental funding amount:

-Tribal Supplemental Funding Amount: Of funds made available for each fiscal year for the tribal transportation program, the Secretary shall set aside the following amount for a tribal supplemental program:

- If the amount made available for TTP is less than or equal to \$275,000,000, 30 percent of such amount.
- If the amount made available for the TTP exceeds \$275,000,000:
-\$82,500,000; plus
-12.5 percent of the amount made available for the TTP in excess of \$275,000,000.

-Tribal Supplemental Allocation: The Secretary shall distribute tribal supplemental funds as follows:

- Distribution among regions: Based on the proportion of the regional funds total to total funds given



- Initially distributed to tribes within a region that receive less in the current fiscal year as compared to FY11 in order to attempt to make them stay at FY11 levels: determine FY11 and FY12 funding levels and then distribute them to those tribes in proportion to the share of the combined amount within the region.
 - There is a ceiling which holds that total finds received from formula and supplemental funding cannot exceed the amount received in FY11.



PART ONE

EXISTING CONDITIONS

1.1 Background Data

1.1.1 Culture and History

Members of the Seminole Nation have lived in southeastern North America since 1750's. In the early 1500's, the Seminoles encountered Spanish explorers. They suffered devastating losses caused by the rash of death brought on by European diseases foreign to their immune systems. Survivors from the Seminole Nation moved toward the peninsula of Florida and were living in that area in close proximity to members of the Euchee and Yamasee.

In 1784, the American Revolution ended and Euro-American settlers began to enter the southeastern United States in large numbers. The tension between native nations and the settlers was exacerbated by the federal policy of taking or buying lands from the tribes and giving them to Euro-Americans. By 1813, the situation had escalated and there began a series of conflicts throughout the region. The defeat of the Creek Nation in Alabama resulted in a flood of refugees into Florida. The Seminoles joined forces with the Creeks and other Native tribes in the area to resist Euro-American invasion.

In 1855, the Third Seminole War began when Seminole leader Billy Bowlegs was directly provoked by U.S. troops. By the 1860's, an estimated 5,000 Native Americans had been forcibly removed from Florida. Less than 200 tribal members escaped removal, seeking refuge in the Florida Everglades. Their descendants comprise today's Seminole Tribe and Miccosukee Tribe.

Those Seminoles relocated to Indian Territory were granted a reservation in the western portion of the Creek Nation. This reservation was alienated, and lands were allotted to tribal members during the late nineteenth century.¹

The Seminole Nation of Oklahoma has 16,744 enrolled members (as of June 1, 2012). The enrollment numbers come from 12 different bands. There are two additional bands which are called "Freedmen Bands" (also *black Seminole*) because they count their descent from escaped slaves. Band membership is matrilineal: children are members of their mother's band. The group is ruled by an elected council, with two members from each band. The capital is at Wewoka, Oklahoma.²

1 Tiller's Guide to Indian Country

2 <http://en.wikipedia.org/wiki/Seminole>



1.1.2 Demographics

Population

Oklahoma’s population in the 2010 U.S. Census (CENSUS 2010) was 3,751,351. While ranking a constant 18th among the 50 states in land area, Oklahoma ranks 28th in terms of its population with 1.22 percent of the U.S. total population in 2010. The state’s population increased by 64 percent between 1930 and 2010³, and 8.7 percent from 2000 to 2010. The state’s population is highly concentrated in urban areas with 58 percent of its inhabitants living in the Tulsa and Oklahoma City Metropolitan Statistical Areas.

The U.S. Census and the Oklahoma Department of Commerce have made the following estimates concerning Oklahoma’s population characteristics for the year 2030.

Table 1.1
Comparison of Current (2010) and Future (2030) Selected Demographic Characteristics

Demographic Characteristics	2010 Census	2030 Estimate	Percent Change from 2010 to 2030
Total Population	3,751,351	4,192,400	10.5% increase
Number of Counties with Population decreases	23	2	91.3% decrease
Population about 65 years of age (Percent of Population)	506,432 (13.5%)	809,133 (19.3%)	37.4% increase
Population below 18 years of age (Percent of Population)	930,335 (24.8%)	995,695 (23.75%)	6.6% increase

Source: Oklahoma Department of Commerce. <http://www.okcommerce.gov/Data-And-Research/Downloads/Population-Projections/2008-National-Population-Projections-Through-2050>

Table 1.2
Population Demographics

County	U.S. Census			Most recent year estimate	Projections			
	1990 Population	2000 Population	2010 Population	2011 Population	2015 Population	2020 Population	2025 Population	2030 Population
Seminole	25,412	24,894	25,200	25,292	25,600	26,000	26,300	26,700

Source: http://www.okcommerce.gov/Libraries/Documents/Projections_of_Cities_Towns_in_Oklahoma_2000_121004413.pdf

³ <http://2010.census.gov/2010census/data/apportionment-pop-text.php>



According to the Seminole Nation Tribal Enrollment office there are approximately 16,774 enrolled members, excluding Freedmen*. A comparison of population data is provided the following table. Tribal membership and Census 2000 information was used to generate the following population table for the Seminole Nation.

Table 1.3
Seminole Nation of Oklahoma Population Comparison Table

Provider	Population
Seminole Tribal Enrollment (June 2012)	16,774
Census 2000	11,452

Source: Tribal Enrollment Director – June, 2012; Census 2010 tribal population not available until mid-2013.

The state is estimating a 1.02% growth rate per year. Typically tribal populations grow at a faster rate than the state population. Therefore a 2% growth rate per year will be used. This growth projection will be used for transportation demand forecasting.

There are approximately 4,718 enrolled members living within Seminole County. The following table illustrates the locations of these enrolled members.

Table 1.4
Seminole Nation Enrolled Members Living within Seminole County

Towns/Post Office	Enrolled Numbers	Freedman Numbers*
Wewoka	1,618	228
Seminole	1,821	52
Bowlegs	74	3
Konawa	610	16
Sasakwa	232	47
Cromwell	17	0

Source: Seminole Nation

* The Freedman (Blacks who are descended from persons who joined to the tribe before and after the Civil War) are citizens of the tribe, and can vote in tribal elections, but they are not enrolled members.

Employment

Oklahoma's per capita income ranking among the 50 states was 29th in 1980, 38th in 1990, 42nd in 2000 and 34th in 2010. In 2010, the poverty line in the 48 contiguous states and District of Columbia was established by the U.S. Government to be \$22,050 annual income for a family of four. The percent of people in poverty in Oklahoma during the 4 year average from 2006-2010 was 16.2 percent compared to the national average of 13.8 percent. In



December 2011, Oklahoma had a 6.3 percent unemployment rate⁴.

Table 1.5
County Employment Data 2011

County	Employment		Unemployment	
	Total	Percent change year ago	Rate	Unit change year ago
Seminole	10,241	0.80%	7.8	-1.00%

Source: U.S. Bureau of Labor Statistics and Real Estate Center at Texas A&M University

Table 1.6
Seminole County Labor Force

	Number	Percent
Population 16 years and over	19,627	-
Civilian Labor Force	10,162	51.8%
Employed	9,272	47.2%
Unemployed	890	4.5%
Armed Forces	15	0.1%
Not in Labor Force	9,450	48.1%

Source: ACS 2010 3 year estimates

⁴ <http://www.deptofnumbers.com/unemployment/oklahoma/>



Table 1.7
Principal Economic Activities

County Employment	2010	Percent
Agriculture, forestry, fishing and hunting, and mining	639	6.9%
Construction	735	7.9%
Manufacturing	1,022	11.0%
Wholesale trade	203	2.2%
Retail trade	1,092	11.8%
Transportation and warehousing, and utilities	486	5.2%
Information	96	1.0%
Finance and insurance, and real estate and rental and leasing	310	3.3%
Professional, scientific, and management, and administrative and waste management services	424	4.6%
Educational services, and health care and social assistance	2,315	25.0%
Arts, entertainment, and recreation, and accommodation and food services	843	9.1%
Other services, except public administration	495	5.3%
Public administration	612	6.6%
Agriculture, forestry, fishing and hunting, and mining	639	6.9%

Sources: http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_10_3YR_DP03&prodType=table

The Nation operates a number of successful ventures that contribute to the tribal economy. These include three gaming facilities and three convenience stores with gas and diesel as well as Grisso Mansion used as a banquet facility.

1.1.3 Physical Soil Characteristics

The Seminole Nation resides in Seminole County in south-central Oklahoma. As with most construction today, the emphasis on cost control and quality control of soil is prompting the implementation of mechanistic designs, performance specifications, and contractor warranties. Compacted soil is an essential element in the construction of highways, airports, buildings, sewers, and bridges. Even though soil density is not the most desired engineering property, it is used almost exclusively by the transportation industry to specify, estimate, measure, and control soil compaction. This practice was adopted many years ago because soil density can be easily determined via weight and volume measurements

1.1.4 Climatological Characteristics

The Seminole Nation covers a large area in Oklahoma. Below is a table of the



Climatological Information for the county. The temperatures in Seminole County range from winter lows in the 30s to summertime highs in the 90's and above.

Table 1.8
Climatological Information for Seminole Nation

County	Mean Annual Precipitation	Mean Annual Temperature	Total Area	Tornadoes 1950-2010
Seminole	41.08"	62 deg F	641 sq miles	51

1.1.5 Land Ownership

In 1849, the Seminole settlements were located in the valley of the Deep Fork, south to the (South) Canadian River in what is now the western part of Okfuskee and Hughes Counties, and neighboring parts of Seminole County. By 1868, the refugee tribal bands were finally able to settle in the area that is known as the Seminole Nation. For the first time in 75 years they had a chance of establishing tribal solidarity. Their council house was built at Wewoka, designated capital of the Seminole Nation. When the Seminole people made their last settlement in Indian Territory, eight tribal square grounds were established in different parts of the Nation where ceremonies, dances and ball games were held. Two of these square grounds were known as Tallahasutci or (Tallahasse) and Thliwathli or (Therwarthle or Thlewahle). There is still a loose organization of the twelve Seminole "towns" or "bands" that were organized for political and geographical reasons in re-establishing the tribal government that had formerly existed in Florida.⁵

Table 1.9
Land Allotment in Acres

Trust	Fee (Pending)	Individually Owned Restrictive Allotments
372	53	35,443

Source: Seminole Nation Website

1.1.6 Tribal Government

The Seminole General Council, chaired by a principal chief and an assistant chief, serves as the elected governing body. The chief and assistant chief are elected at large every four years. The Seminole Nation ratified a constitution on March 8, 1969, which the Commissioner of Indian Affairs approved on April 15, 1969. The Nation is comprised of 12 matrilineal bands, plus two Freedmen bands. Each band has an elected chairman and vice-chairman and meets monthly. Each band elects two representatives to the General Council every two years.

⁵ <http://www.seminolenation-indianterritory.org/>



1.1.7 Existing Land Use

Services and Retail: The tribe owns the Seminole Nation Trading Post, Seminole Nation Travel Plaza, the Seminole Nation River Mist Convenience Store, Grisso Mansion, and North Park Plaza, a lease management building.

Gaming: The Nation operates three gaming facilities: The Seminole Nation Casino is



located on I-40 at the Intersection with State Highway 99. The Nation is currently working on an expansion of this casino. The River Mist Casino is located at the Intersection of Highway 99 and 39 near Konawa. The Seminole Trading Post, located in Wewoka, has a smoke shop and a convenience store. This is also known as the Seminole Nation Gaming Center.

Institutional/Governmental: The Seminole Nation Tribal Complex is located in the City of



Wewoka, Oklahoma. Wewoka lies at the junction of U.S. 270 and Oklahoma Highway 56, approximately 30 miles southeast of the Town of Shawnee. Wewoka is also the site of several Seminole Nation programs and services. The Mekusukey Mission which includes tribal offices, recreational areas, industrial, commercial, and agricultural areas is located southwest of the City of Seminole. It is conveniently located one mile from Highway 99 and 13 miles from I-40.

Media and Communication: 10,000 copies of the monthly newspaper named COKV TVLVME is written, published, and distributed to the tribal citizens, as well as put into the local papers each month. The Seminole Nation of Oklahoma also produces a weekly radio program.

Tourism and Recreation: Wewoka is located about 40 minutes' drive from Lake Eufaula, the largest recreational lake in Oklahoma. Lake Eufaula is home to two resort lodges and many vacation homes.



Seminole Nation Days hosted by the Nation is held in September at the Mekusukey Mission Grounds, celebrate tribal culture and heritage. In 2006, the theme for the celebration was “Proud History - Bright Future”. The celebration was held on historic Mekusukey Mission Grounds. The celebration marked the 150-Year Anniversary of the Treaty of 1856 and the beginning of the present day Seminole Nation. The theme was one of enduring hope, and a glimpse of the Nation’s path to progress and prosperity.

Seminole Nation Museum: Founded in 1974 by the citizens of Wewoka, the Seminole Nation Museum documents the history and culture of the Seminole Indian Nation, the Freedmen, and the early Oklahoma Pioneers since 1849.

It is housed in the beautiful native rock building that was once the original Wewoka Community Center, the Museum contains a comprehensive research library, art gallery, gift shop and thousands of square feet of display space revealing the social, cultural, educational and economic heritage of these early settlers.



A military room, dedicated to local servicemen and women contains memorabilia and artifacts dating from the Civil War. Another area is devoted to the Great Oklahoma Oil Boom, once the life blood of the Wewoka area.



Seminole Nation Dialysis Center: The Dialysis Center is located on Route 1 at Mekusukey Mission in Seminole. The center has 67 beds. Within the center, there is a diabetes program offered as well. The program will eventually move to its own building when the multi-purpose community health and wellness center is built. It will house three programs: Diabetes, Community Health, as well as the Alcohol and Substance Abuse program,

Community Facilities and Services: The Nation maintains a community center in Wewoka, Konawa, Sasakwa, Strother and the Mekusukey Mission Tribal Grounds. Community Services of the Seminole Nation offers child care, Indian Child Welfare, Low Income Home Energy Assistance Program, emergency tribal assistance, and Business and



Regulatory Commission programs. Its community division offers environmental, historical preservation, cultural and language preservation, housing, home grant, housing improvement, roads, transportation, Lighthorsemen, wildlife, and REACH programs.



Education: The Nation's education division offers adult, higher Start, JTPA, TERO, and Judgment Fund programs. Tribal students go to local public schools. Seminole State College, a two year junior college, is located in the City of Seminole about 15 miles from Wewoka.

Electricity: Regional providers supply electricity to individual tribal members.

Fuel: The tribal community services department furnishes home heating fuel to tribal members.

Water Supply: Septic tanks and the municipal sewer system provide service to tribal members.

Health Care: Health care services are available through the Wewoka Service Unit of the Indian Health Service of the U.S. Public Health Service. The health center is served by three physicians, one physician's assistant and one family nurse practitioner. Programs include general medicine, prenatal and well-baby care, optometry, dentistry, and counseling. Community health personnel are available and offer nutrition programs for pregnant, overweight, or diabetic patients.



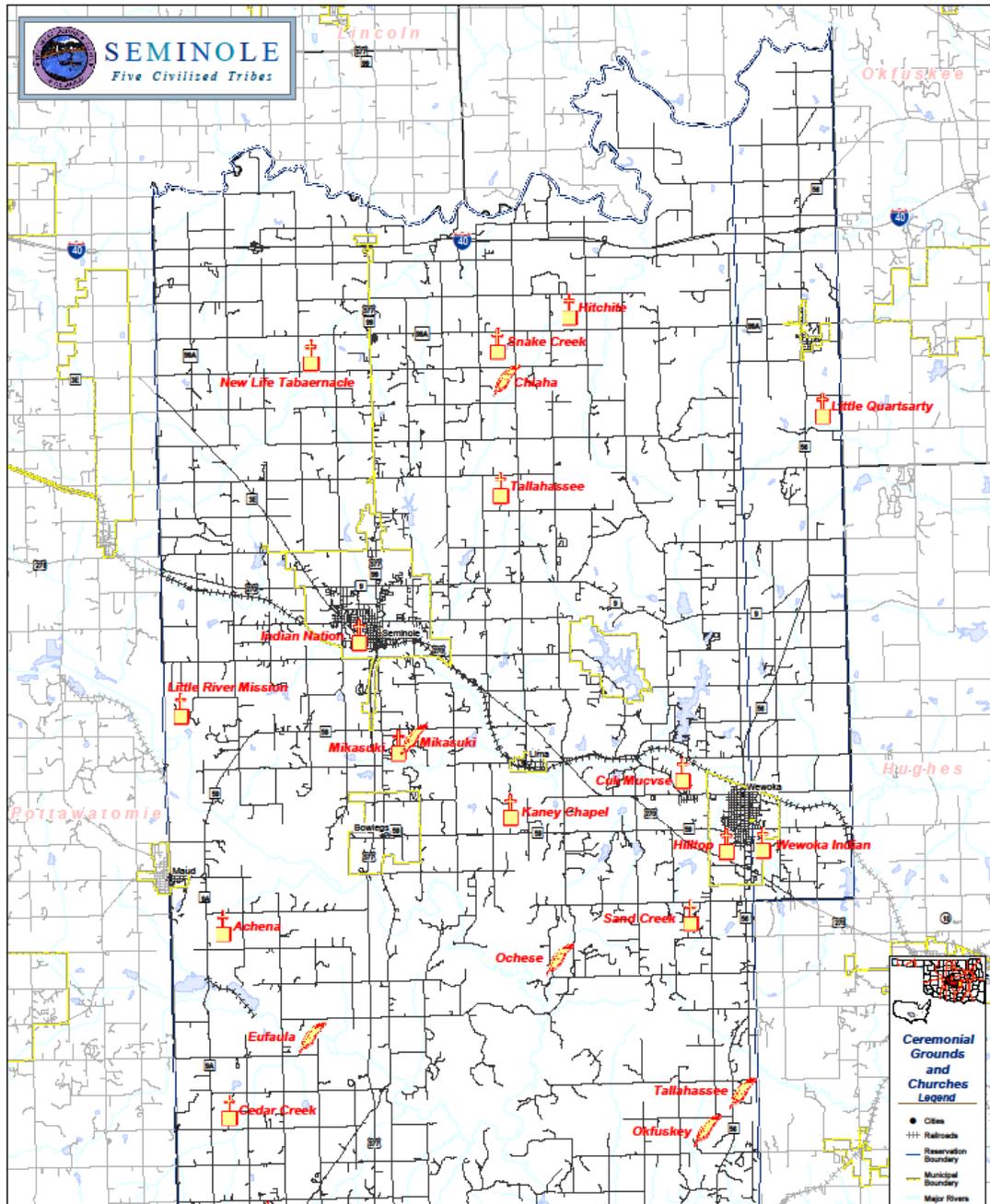
The Nation's health division offers several programs and the services of a community health representative. These programs include older residents, alcohol and substance abuse, food distribution, community service block grant, and environmental health programs.



Central Oklahoma Family Medical Center: The mission of Central Oklahoma Family Medical Center, Inc. is to meet the needs of patients with care, compassion, and the highest quality. Central Oklahoma Family Medical Center has approximately 10,000 to 12,000 visits per year from an active patient base of 15,000 – 20,000 persons. The Indian Health Service (IHS) Clinic in Wewoka has 30,000 visits per year from an active patient base of 9,000. The IHS Clinic only covers those in the Indian Community, while the Central Oklahoma Family Medical Center accepts patients from the general population of the county.

Churches and Ceremonial Grounds: The following exhibit illustrates ceremonial grounds and churches within the Seminole Nation.

Transit Department: The department runs a public transportation system for all of Seminole County consisting of one fixed route, which operates four times a day; as well as demand response. It operates Monday through Friday during business hours. Currently the transit department has six vehicles in operation.





1.2 Transportation System

To understand how the transportation system functions within Seminole Nation, an inventory of those elements comprising the existing system was conducted. Conducting this inventory was an integral step of the planning process in order to identify areas in need of improvement over the 20-year planning period. This inventory was based on available data compiled by the Nation and County and State, data available through Geographic Information System (GIS) database, and additional information compiled through supplemental field data collection efforts. This data included traffic counts, accident history, bicycle and transit routes, and classification.

This section describes the transportation system, as it presently exists. While the emphasis will be on the road system, related systems (such as school buses, public transit, EMS, fire and postal routes) will be addressed.

1.2.1 Existing Roadway System

Public roads within the Nation were constructed and maintained by the Oklahoma Department of Transportation (ODOT) and Seminole County. The National Tribal Transportation Inventory Program, as of FY 2012, recorded 984.5 miles of roads on the BIA/TTF's Seminole Nation roads system.

Map A depicts the location and surface type of each road.

1.2.2 Roadway Inventory

As part of this Long Range Transportation Plan, a review of the complete inventory of Seminole Nation Roads including State, County and Tribal roads is done. The primary objective of this inventory is to obtain current, accurate, uniform and verifiable data on all Roads for the purpose of updating the Eastern Oklahoma Regional Office road inventory database. This provides valuable information for many roadway planning and management activities. The updated inventory will also be used to update the Nationwide Tribal Transportation Facility Inventory database utilized by the BIA-Division of Transportation (BIADOT) to compute Regional Office and Nation allocations of TTF program funds (Highway Trust Funds) using a formula.

1.2.3 Roadway Classifications

Roads are classified as to the functions they perform with regard to the movement of traffic and access to property. Within the Tribal Transportation Facility system there are two types of road classifications: State Highway Classifications and BIA/Tribal Road Classifications.



Both the state and the Tribal/BIA systems utilize functional classification as the basis for classifying their roads. However, the criteria used to determine specific classifications differ between the state and the Tribal/BIA.

1.2.3.1 Generalized Functional Classification Definitions

Functional Classification is the grouping of roads, streets and highways into integrated systems, each ranked by its relative importance and the function it is intended to serve, relative to mobility and land access. It also identifies the role each street or highway should play in channeling the flow of traffic through a rural and/or urban environment in a logical and efficient manner. The three general functional classification categories are Arterial, Collector and Local Roads. At one extreme, the Arterial's function is to move through-traffic at high speed over long distances with limited land access to adjacent property; cross-traffic is discouraged. Definitions of these general functional classifications, along with desirable characteristics, are given below.

Freeways and Expressways primarily serve long distance travel between major communities. Freeways provide the greatest mobility, with strictly controlled access allowed only at interchanges. No direct property access is allowed. Expressways also serve regional traffic, and access is allowed primarily at major intersections, although interchanges can be built for particularly high volume intersections. Occasionally direct property access is allowed when there is no other way to provide access.

Arterials carry relatively large volumes of traffic through the state and to major trip destinations such as employment or commercial centers. Arterials fall into two categories; principal and minor. Principal (Major) Arterials include United States and Interstate highways, and state highways that serve all urban areas with a population greater than 50,000. Minor arterials are routes that provide interstate and inter-county service to cities and towns with populations of less than 25,000 and other traffic generators capable of attracting travel over long distances. Principal arterials usually have 4 traffic lanes (2 lanes in each direction), provide storage for left turns at most intersections, and are separated by a median or continuous left turn lane. Minor arterials may only have two traffic lanes and should include a storage lane for left turns at major intersections. A minimum right-of-way width of 60 to 100 feet is needed for roads with more than 4 lanes. However, right-of-way should be based on preferable dimensions of each roadway element.

Collectors generally serve travel of primarily intra-county and regional importance rather than statewide importance and have shorter travel distances than arterial. They also provide a balance between mobility and land access by customarily permitting access to all abutting properties. Like Arterials, there are two categories of collectors; major and minor. Major Collectors provide service to any county seat or community not served by an arterial road, and serves other traffic generators of intra-county importance such as: regional parks, consolidated schools, agricultural areas, shipping points, etc. Minor Collectors are spaced at



intervals consistent with population density, collect traffic from local roads, and provide access to all developed areas within a reasonable distance of a major collector or higher classified road. A minimum right-of-way width of 80 to 100 feet is desirable for a collector.

Local Roads comprise the balance of the road network and carry low volume, low-speed traffic. The primary function of a local road is to provide access to individual parcels of property. Local roads usually serve residential areas and may also serve scattered business and industry sites that generate modest traffic. A minimum right-of-way of 60 to 80 feet is desirable for a local road.

1.2.3.2 State Highway Classification

The functional classification of roads has been used by state highway departments for many years for a variety of important highway functions such as: assigning jurisdictional responsibility, determining cost allocations, allocating funds to local units of government, and establishing appropriate design standards. Prior to the enactment of the *Intermodal Surface Transportation Efficiency Act of 1991* (ISTEA), it became apparent that the federally mandated functional classifications completed nearly 20 years prior, although routinely updated by the states, were no longer consistent among the states and needed to be reclassified before the establishment of a National Highway System (NHS). As a result, Congress included Section 1006 (c) in *ISTEA*, which required the states to reclassify roads and streets within the state, under the oversight of the Federal Highway Administration, by September 20, 1996.

1.2.3.3 BIA Road Classifications

The BIA road system has several classes of routes. Functional classification means an analysis of a specific transportation facility taking into account current and future traffic generators, and their relationship to connecting or adjacent BIA, state, county, Federal, and/or local roads and other intermodal facilities. Functional Classification is used to delineate the difference between the various road and/or intermodal transportation facility standards eligible of funding under the TTF program. As part of the system management, all transportation facilities included on or added to the TTF inventory must be classified according to the following functional classification system:

Class 1. **Major arterial roads** providing an integrated continuous network with characteristics for serving traffic between large population centers, generally without stub connections and having average daily traffic volumes of 10,000 vehicles per day or more with more than two lanes of traffic.

Class 2. **Rural minor arterial** roads providing an integrated network having the characteristics for serving traffic between large population centers, generally without stub connections. It may also link smaller towns and communities to major resort areas that



attract travel over long distances and generally provide for relatively high overall travel speeds with minimum interference to through traffic movement. Generally provide for at least inter-county or inter-state service and are spaced at intervals consistent with population density. This class of road will have less than 10,000 vehicles per day.

Class 3. City Local. Streets that are located within communities serving residential areas.

Class 4. Rural major collector road is collector to rural local roads.

Class 5. Rural local road that is either a section line and/or stub type roads, make connections within the grid of the TTF system. This class of road may serve areas around villages, into farming areas, to schools, tourist attractions, or various small enterprises. Also included are roads and motorized trails for administration of forests, grazing, mining, oil, recreation, or other use purposes. **Rural Minor Collectors** are also included in Class 5.

Class 6. City minor arterial streets that are located within communities and serve as access to major arterials.

Class 7. City collector streets that are located within communities and serve as collectors to the city local streets.

Class 8. This class encompasses all non-road projects such as paths, trails, walkways, or other designated types of routes for public use by foot traffic, bicycles, trail bikes, snowmobiles, all terrain vehicles, or other uses to provide for the general access of non-vehicular traffic.

Class 9. This classification encompasses other transportation facilities such as public parking facilities adjacent to TTF routes and scenic byways, rest areas, and other scenic pullouts, ferry boat terminals, and transit terminals.

Class 10. This classification encompasses airstrips that are within the boundaries of the TTF system grid and are open to the public. These airstrips are included for inventory and maintenance purposes only.

Class 11. This classification indicates an overlapping or previously inventoried section or sections of a route and is used to indicate that it is not to be used for accumulating needs data. This class is used for reporting and identification purposes only.

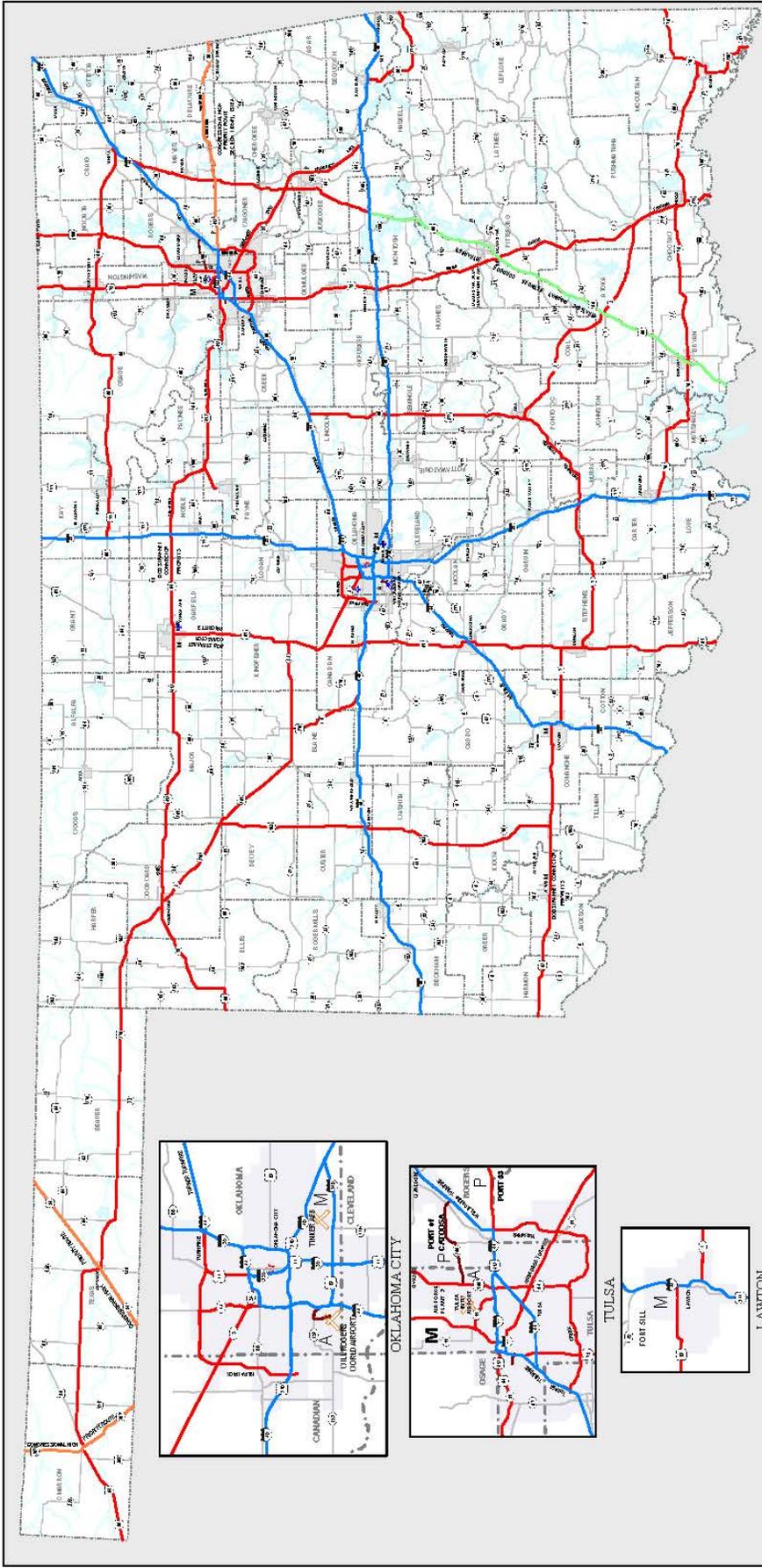
In accordance with *Federal Register/Vol. 69, No. 137/Monday, July 19, 2004/Rules and Regulations*, (Codified at 25 Code of Federal Regulations (CFR) Part 170), the transportation plan must identify the classification for each road on the TTF. The table entitled "Inventory Comparison Listing" in *Appendix C* illustrates the BIA road classifications for every route on



the Seminole Nation.

The following exhibits illustrate the functional classification for the State of Oklahoma, Seminole County, and urban areas of Seminole.

OKLAHOMA NATIONAL HIGHWAY SYSTEM



- █ INTERSTATE HIGHWAY
- █ NHS CONNECTOR
- █ STRAIGHT
- █ CONGRESSIONAL HIGH PRIORITY ROUTE
- █ OTHER PRINCIPAL ARTERIAL
- █ NON-NHS TOLL ROUTE
- █ PROPOSED NHS ROUTE

- D INTERSTATE HIGHWAY SYMBOL
- A US HIGHWAY SYMBOL
- O STATE HIGHWAY SYMBOL
- U URBAN AREA
- C COUNTY LINES
- R RIVERS AND LAKES

- M MILITARY INSTALLATION
- A MAJOR AIRPORT
- P MAJOR PORT

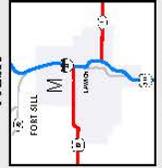
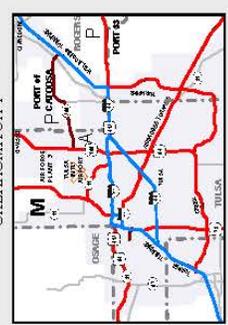
TOTAL STATE HIGHWAY SYSTEM MILEAGE = 12,271.26
 STATE MAINTAINED NHS MILES = 2,738.08
 TURNPIKE MAINTAINED NHS MILES = 32.27
 NHS CONNECTOR MILES = 11.54

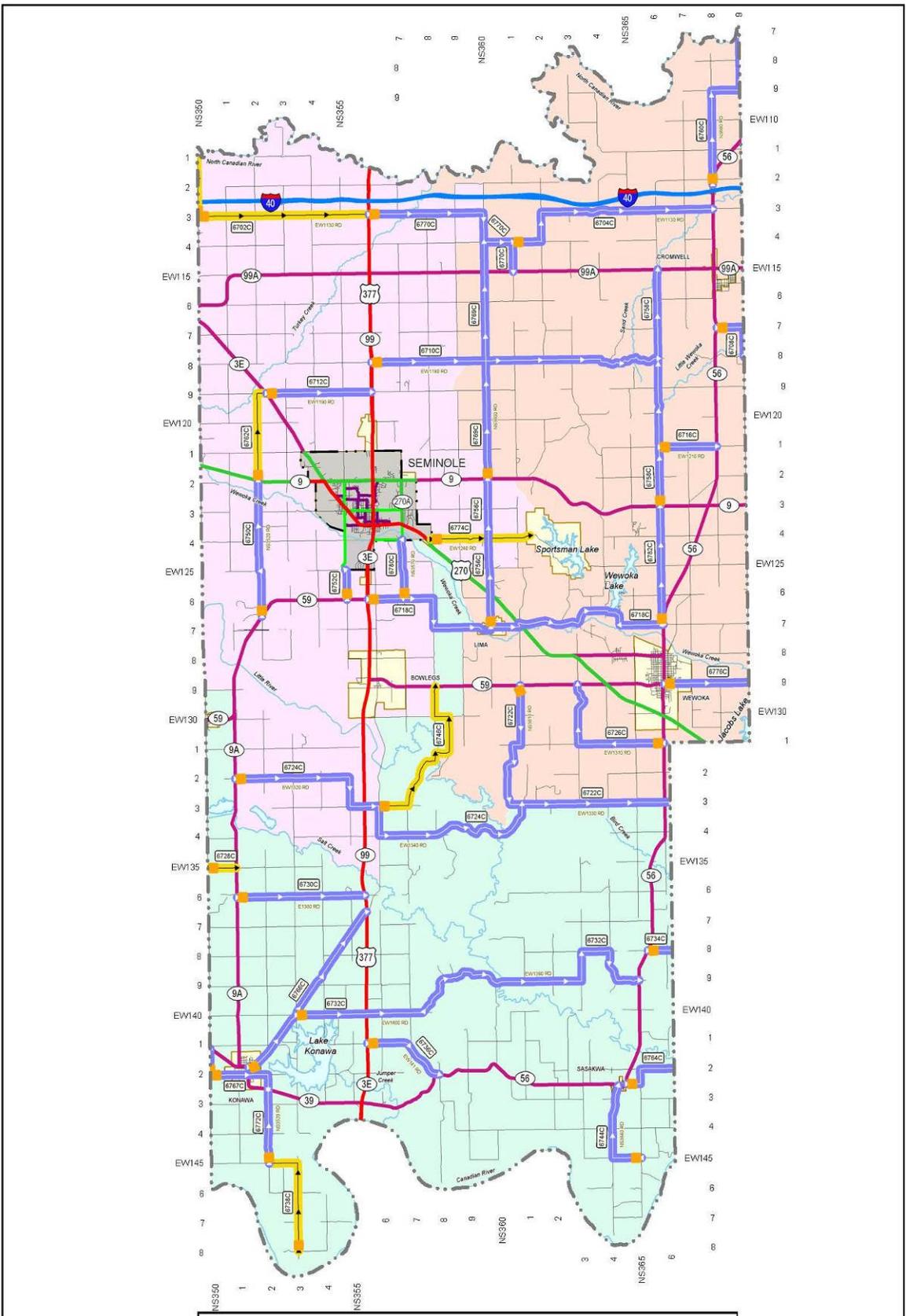
Submitted to FHWA: May 4, 1993
 Revised: U.S. 287 Addition October 4, 1993
 Revised: U.S. 70 & SH 3 November 2, 1993
 Revised: U.S. 169 May 13, 1994
 Revised: U.S. 81 October 4, 1995
 Revised: NHS Connector 412 August 13, 1999
 Revised: KILPATRICK TURNPIKE June 18, 2001
 Revised: CREEK TURNPIKE - Phase I January 9, 2003
 Revised: SH 206 NHS Connector I-44 to Fort of Chonosa April 6, 2004
 Revised: U.S. 97 U.S. 271 I-40 to I-540 July 16, 2006



OKLAHOMA DEPARTMENT OF TRANSPORTATION
 200 N. STATE STREET
 OKLAHOMA CITY, OKLAHOMA 73104

AUGUST 1, 2009
 G:\INHSNEW_NHS.RWS





OKLAHOMA DEPARTMENT OF TRANSPORTATION
 PLANNING & RESEARCH DIVISION
 300 N.E. 21ST STREET
 OKLAHOMA CITY, OKLAHOMA 73103

Legend					
	Interstate		Minor Collector - County		Commissioner District 1
	Freeway / Expressway		Proposed Route		Commissioner District 2
	Principal Arterial - Highway		Local Roads		Commissioner District 3
	Minor Arterial - Highway		RFC_NLF_ID		City Limit Boundary
	Major Collector - Highway		RFC Route Begin Point		Urban Area Boundary
	Major Collector - County				

Seminole County (67)

RURAL FUNCTIONAL CLASSIFICATION (RFC)
 Updated: April 2010

Functional Classification_V6 (12010) RFC_Statewide.gxd

SEMINOLE

Urban Area Boundary[®]
and
Functional Classification

Functional Classification

	INTERSTATE
	OTHER FREEWAY / EXPRESSWAY
	HIGHWAY PRINCIPAL ARTERIAL
	HIGHWAY MINOR ARTERIAL
	HIGHWAY COLLECTOR
	URBAN PRINCIPAL ARTERIAL
	URBAN MINOR ARTERIAL
	URBAN COLLECTOR
	MAJOR COUNTY COLLECTOR
	MINOR COUNTY COLLECTOR
	LOCAL ROADS
	COUNTY BOUNDARY
	URBAN AREA BOUNDARY
	MUNICIPAL BOUNDARY
	LAKES
	MAJOR STREAMS
	NLF ID UFC
	RFC NLF ID

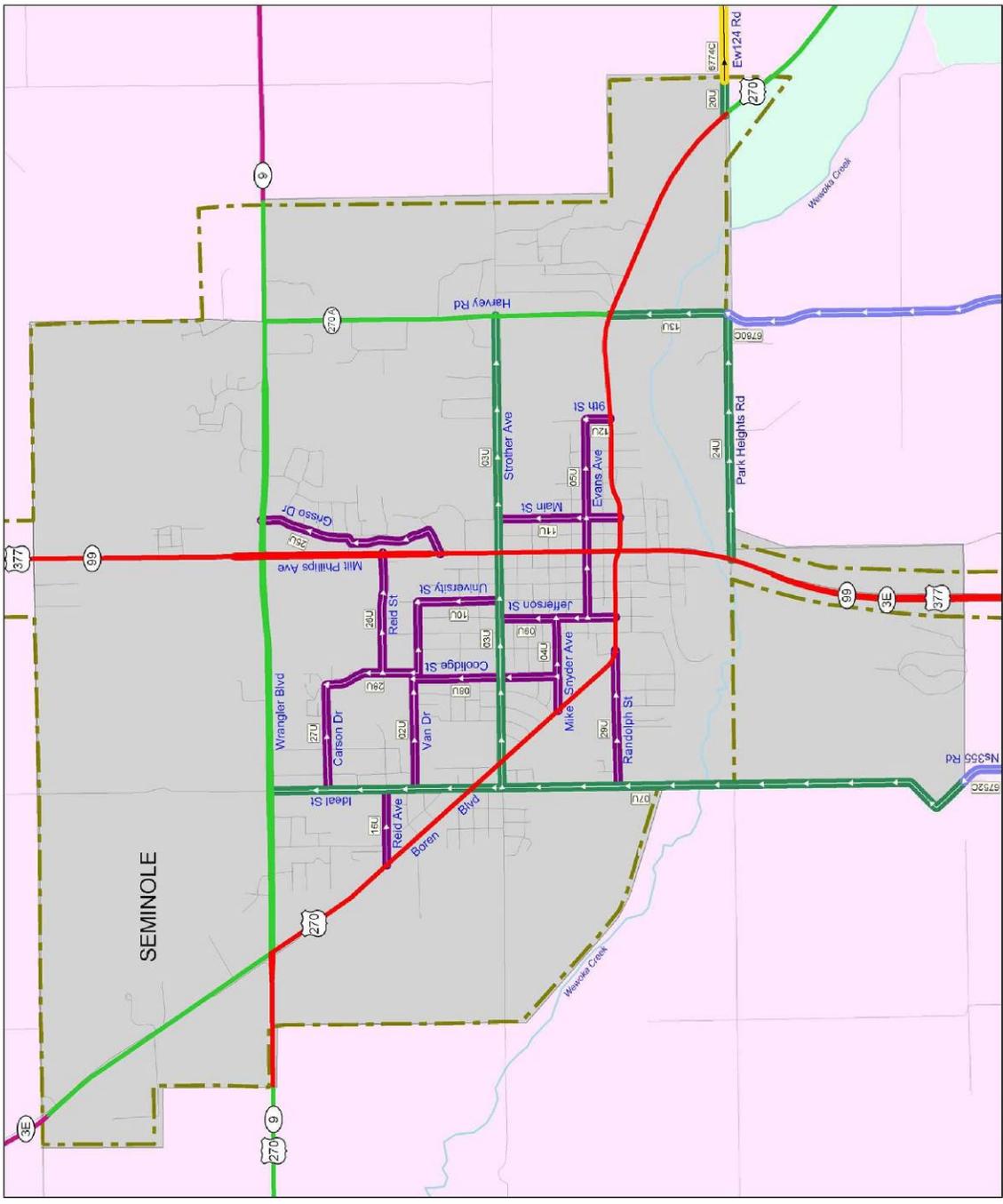


FHWA
 DATE APPROVED: October 31, 2002
 BY: Elizabeth Bowen
 Division Administrator
 Federal Highway Administration
 Revision Date: _____
 URBAN AREA
 DATE APPROVED: October 8, 2002
 BY: James V. Bell
 Mayor, City of Seminole

*Based on Adjusted
 2000 Census Boundary

Seminole County

FLORIDA DEPARTMENT OF TRANSPORTATION
 605 UNIVERSITY BLVD., SUITE 200
 TALLAHASSEE, FLORIDA 32310
 (904) 922-7100 FAX (904) 922-3300





1.2.4 Right-of-Way Status

The definition of a BIA System Road states that it is a road “for which the BIA has, or plans to obtain legal right-of-way.” Currently, the BIA does not have any right-of-way in Seminole Nation. The right-of-way is owned by the State, Counties, or Cities.

1.2.5 Traffic Control

Traffic control devices are all signs, signals, markings, and devices placed on or adjacent to, a street or highway by a public body having authority to regulate, warn, or guide traffic.

The *Manual on Uniform Traffic Control Devices* is the publication that sets forth the basic principles which govern the design and usage of traffic control devices. The Manual was prepared by a National Committee which included state, county, and municipal representation.

Traffic control on the Nation is provided by a variety of devices.

1.2.6 Drainage and Bridges

Even though their primary function is for the movement of traffic, roads and streets need to be designed with drainage in mind. The drainage facilities associated with a designed street network offers one of the most economical and expedient means of conveying storm water through a developed area. Continuing improvement to the Nation’s street and road system will provide great benefits to the Nation’s drainage problems. It will be important for the two systems, drainage and road improvements, to evolve concurrently

Drainage of water from pavements has been an important consideration in road construction for more than 2000 years. However, modern processing, handling, and placement of materials frequently result in base courses that do not transmit water or drain; combined with increased traffic volumes and loads, this often leads to pavement distress caused by moisture in the structures.

Many premature pavement failures (occurring at less than 50 percent of expected life) have been traced to inadequate subsurface drainage. Although most agencies recognize that water in pavement is not desirable, different philosophies exist on how to reduce the effects of this problem. Attempts range from completely sealing the pavement (including incorporating low permeable base with no drainage) to incorporating a fully drainable pavement section with permeable base and edge drains. Numerous approaches fall somewhere in between (e.g., using edge drains with dense-graded bases).

To understand and analyze the conditions under which the pavement must function, the designer needs information on highway geometrics, surface drainage, non-pavement subsurface drainage, climate, and soil properties. These data enable the designer to predict



the amount of free water that will enter the pavement structure, to predict the free water surface, and to establish the design sub-grade moisture content. Two general types of subsurface drainage criteria are used: (a) a time for a certain percentage of drainage or (b) an inflow-outflow criterion.⁶

Due to the diversity in topography on the Seminole Nation, careful attention must be made in the design of roadways. Inadequate roads and bridges will hamper economic development, hinder tourism, and pose safety threats.

1.2.6.1 Bridges

According to the U.S. Department of Transportation Federal Highway Administration Indian Reservation Roads Program – *Transportation Planning Activity Guidelines*:

Tribal Transportation Facility Bridge Inventory: This activity involves the gathering, maintaining, and distribution of all information as required for the national bridge inventory database. This includes information such as route number, bridge location and type, length, width, surface type, bridge sufficiency ratings, bridge number, etc. This database is an important tool in identifying those existing bridges that have the highest need for repair and/or replacement.

FHWA, in consultation with the States, has assigned a sufficiency rating (SR) to each bridge (greater than 20 ft.) inventoried. Formula (SR) rating factors are as outlined in the current "recording and Coding Guide for Structures Inventory and Appraisal (SI&A) of the Nation's Bridges."

General Management Circuit Engineering District #4 provides County Commissioners with hard copies of Bridge Evaluation Reports. Copies of these reports can be obtained directly from the County Commissioners.

Per FHWA: "An SD bridge is one that (1) has been restricted to light vehicles only, (2) is closed and/or (3) requires immediate rehabilitation to remain open. An FO bridge is one in which the deck geometry, load carrying capacity (comparison of the original design load to the State legal load), clearance, or approach roadway alignment no longer meets the usual criteria for the system of which it is an integral part."⁷

Table 1.10
October - 2010 Bridge Inventory - Oklahoma

State	Total Interstate & Bridges	Total SD/FO	%	Total City/County Bridges	Total SD/FO	%	Total All Bridges	Combined Total SD/FO	%
Oklahoma	7,670	1,621	21%	16,128	6,178	32%	23,798	6,799	29%

⁶ Road Management and Engineering Journal, *Pavement Subsurface Drainage Systems* published in 1997

⁷ SD/FO = Structurally Deficient or Functionally Obsolete



Source: Better Roads http://www.betterroads.com/files/2011/01/Nov10_BetterBridges1.pdf

Table 1.11
2012 Bridge Inventory-Seminole County, Oklahoma

County	Structurally Deficient Bridges	Functionally Obsolete Bridges	Total Bridges in County
Seminole	87	11	223

There are several identified bridges located on the Seminole Nation. Indian Reservation Road bridges must be inspected at least every 2 years to update the National Bridge Inventory (NBI) using criteria that meets or exceeds the applicable Federal standards (23 CFR 650.305).

1.2.7 School Bus and Mail Routes

There are many schools located within the Seminole Nation. Due to the location of these schools virtually every road within their vicinity operates as a school bus route. There are also several US post offices located within the Nation, therefore every road within their vicinity operates as a mail route.

1.2.8 Rail System

Class I railroads operating in the state include BNSF Railway Company (BNSF), Union Pacific (UP), and Kansas City Southern (KCS). BNSF shares trackage with Amtrak passenger rail services between Oklahoma City and the Texas state line. Class III railroads are shown on the statewide railroad map. Railroads in Oklahoma continue to be a vital resource for the growing manufacturing, merchandising and distribution economy in our state. Fourteen (14) rail carriers serve a large portion of the state support transportation system.

The railroad in Seminole County has been abandoned for years without much hope of being revitalized.



1.2.9 Motor Vehicle Accident Data

Traffic accidents take a tremendous economic toll on a community, in addition to the suffering and grief that they cause to those injured or killed and their loved ones. The National Highway Traffic Safety Administration (NHTSA) estimates that in 2004, the economic cost of vehicle crashes in Oklahoma was \$2.7 billion, which is \$769 per person in



the state. These costs include medical costs, lost economic and household productivity, psychological or emotional trauma, property damage and travel delays.

The following table illustrates the number of fatalities which occurred in Seminole County from 1999 to 2009. Specific accident location is difficult to obtain.

Table 1.12
Fatal Car Crashes in Seminole County

Year	# of Fatalities
1999	24
2000	6
2001	8
2002	4
2003	17
2004	16
2005	5
2006	12
2007	11
2008	11
2009	18

Source: <http://www-fars.nhtsa.dot.gov>

1.2.10 Traffic Hazards and Safety Issues

Oklahoma's 3.8 million citizens and its visitors depend on a safe and efficient transportation system to provide them with a high level of personal and commercial mobility, which enhances the quality of life in the state and supports Oklahoma's growing economy. Oklahoma's traffic fatality rate is 16 percent higher than the national average. An average of 738 fatalities occurs on Oklahoma's roads each year. Studies have shown that roadway design is an important factor in approximately one-third of all fatal accidents.

- There were 1.57 traffic fatalities per 100 million vehicle miles of travel in Oklahoma during 2009, which is 27 percent higher than the national average of 1.15 traffic fatalities.
- Traffic crashes are a major source of fatalities in Oklahoma, with 3,691 people killed on the state's roads between 2006 and 2010, an average of 738 fatalities per year.
- The majority of people (92 percent) killed in traffic accidents in Oklahoma from 2006 to 2010 were occupants of vehicles. Seven percent of those killed were pedestrians and less than one percent were bicyclists.

Several key factors that contribute to fatal and serious traffic accidents in Oklahoma include the safety design of the actual roadway, human behavior (speeding, drug and alcohol use, safety belt use, drowsiness or distraction), the safety features of the vehicle and the medical care of the victims.



The design of a roadway has been found to be an important factor in approximately one third of all fatal traffic accidents. Roadway safety factors that have a significant impact on traffic safety include lane widths, and radius of curves, the number of lanes and the presence or absence of roadway safety features such as adequate shoulders, rumble strips, guard rails, turn lanes, adequate lighting and signage, shielded or removed roadside obstacles, and median barriers.⁸ Roadway safety features such as widened lanes, added or improved medians, improved intersection design, paved shoulders and added rumble strips can reduce the number of traffic fatalities and serious accidents.

Contained in *Appendix D* is an exhibit illustrating the highway needs identified within Division Three.⁹ The routes shown in red need to have surface replacement now, those in green should be repaired in the next five years.¹⁰

Appendix D provides an exhibit illustrating Structurally Deficient/Functionally Obsolete Bridges for Seminole County.

1.2.11 Law Enforcement, Fire Protection and Health Services

Through Resolution RE-93-94-2 the City of Wewoka and the Bureau of Indian Affairs agreed for cross-deputization. The purpose of cross-deputization is to provide for efficient, effective, and cooperative law enforcement efforts for the Nation and the City of Wewoka.

Law Enforcement is provided by the Seminole Light Horse Police Department. This force was named after a company of Seminole troops who were the police force during Territorial Days. There are currently nine Light Horse officers and one dispatcher. They are currently housed in the General Council building at the Mekusukey Mission.

For fire services, the local tribal members have residential services provided to them by the city in which they live. In addition, the BIA provides wildfire response to the rural areas.

Table 1.13
Fire Departments in the Seminole Nation Area

AREA	FIRE STATION	RESCUE/EMS
City of Seminole	2	0
Wewoka	1	1
Total	3	1

Source: Firefightersonline.com

The Indian Health Service (IHS) Area Office is located in Oklahoma City providing technical

8 Getting Home Safely: An Analysis of Highway Safety in Oklahoma, April 2006

9 Division Three is the Oklahoma Department of Transportation (ODOT) district that Seminole County is located in.
10 “Everybody’s Problem” Conditions as of July, 2002 – Highway Needs Study Years to Next Surface Replacement



and administrative support for the provision of health care to American Indians residing in Oklahoma, Kansas, and a portion of Texas. This is the largest IHS service population in the United States extending health care to over 281,000 American Indians. Approximately 12,000 admissions and 1,318,000 outpatient visits are made annually at the seven different Indian hospitals and 40 outpatient health centers located throughout Oklahoma, northeastern Kansas, and Eagle Pass, Texas.

To provide health services to this population, the Oklahoma City Area Office is organized into twelve Service Units. The Department of Health and Human Services/U.S. Public Health Service/Indian Health Services Wewoka office is located forty-eight miles north of Ada (75 miles from Oklahoma City). The Wewoka Health Center employs three physicians, one physician assistant, and one family nurse practitioner who handle nearly 11,000 outpatient visits annually. Another 12,700 visits are managed by support staff. To a population of mostly Seminole Indians, the clinic renders outpatient services in general medicine, prenatal and well-baby care, optometry, dentistry, and counseling for emotional problems.¹¹

¹¹ <http://www.ihs.gov/FacilitiesServices/AreaOffices/oklahoma/okc-wewoka-su.asp>



1.3 Public Transportation

1.3.1 Public Transportation

At the end of the state’s Fiscal Year (FY) 2004, Oklahoma had 20 rural transit systems in operation using 5311 funding. As of FY 2011 there were 19 rural transit systems in operation, as two of the systems merged into one. All systems provide a demand responsive service and in some cases offer route deviation. Ridership and service characteristics for each system are summarized below as given by each system. System wide, the average trip length per passenger was 10.3 miles for FY 2011, suggesting intercity and/or rural-to-city trip making. Many rural systems individually link together many communities and have extensive service areas.

Table 1.14
Rural System Statistics by Federal Fiscal Year

Fiscal Year	Revenue Miles	Passenger Miles	All Passenger Trips	Elderly Trips	Disabled Trips	Elderly & Disabled Trips
2010	17,125,159.2	24,526,179.1	3,025,934.0	317,845.0	282,728.0	188,145.0
2011	18,258,723.7	31,862,651.6	3,100,938.0	351,591.0	298,578.0	10,381.0
2012	11,955,645.3	19,906,283.7	2,048,529.0	266,338.0	167,414.0	102,174.0

Source: Transit Programs Division, Oklahoma Department of Transportation, June 2012

The following table illustrates Rural Transit Information for the counties where transit is available that received 5311 funding. It does not include Seminole Nation, as the database from Oklahoma Department of Transportation currently only lists 5311-funded rural transit systems. They are looking to list all rural systems soon.

Commercial bus lines no longer serve the cities in Seminole County. Commercial bus traffic from Shawnee and Oklahoma City and Ft. Smith, Muskogee, and Okemah go back and forth along I-40, without any stops in Seminole County.

Oklahoma’s public transit systems need more funding and support from local and state officials to prevent stagnation of transit systems and state and local economies. Federal transportation dollars can be won to help grow existing rural and urban systems. Increase in ridership from rural transit and from passenger rail suggests that Oklahoma has potential to be a leading transit and Intermodal state. With careful planning and marketing these opportunities for growth can be captured and the positive impacts will be felt not just by the transit providers but by the public and local economies.¹²

¹² 2005-2030 Statewide Intermodal Transportation Plan – Planning & Research Division Oklahoma Department of Transportation, October 2005



Table 1.15
Rural Transit System Information and Statistics

Transit Program	Service Area	No. of Vehicles	Ridership		Annual Vehicle Revenue Miles	Annual Passenger Miles
			Elderly/ Disabled	Other		
Beaver City Transit	Beaver County	2	1,876	9,121	10,259.8	30,397.8
Call a Ride Public Transit	Pontotoc County	19	18,148	32,771	172,836.8	299,810.1
Central Oklahoma Transit System	Pottawatomie, Seminole, Oklahoma and Cleveland Counties	12	8,644	11,272	291,205.4	241,966.7
Cherokee Strip Transit	Cherokee, Garber, Covington, Billings, Fairmont, Breckenridge, Perry, Waukomis, Tonkawa, Ponca City, Blackwell, Kingfisher, Watonga, and Hunter	44	28,360	49,654	1,156,151.4	985,848.1
Cimarron Public Transit System	Creek, Kay, Pawnee and Osage	55	45,576	82,348	1,150,566.0	953,449.7
Delta Public Transit	McClain, Garvin and Parts of Cleveland County	16	31,108	10,707	148,977.9	170,320.9
Enid Pubic Transportation-The Transit	Enid and North Enid	15	26,865	40,196	351,921.0	299,326.8
First Capital Trolley	Guthrie	50	25,437	93,994	1,212,152.1	1,105,328.4
Guymon Transit- The Ride	Guymon	9	18,604	56,465	127,083.4	231,996.3
Jamm Transit	Johnston, Atoka, Marshall and Murray Counties	41	29,673	78,896	639,986.0	993,604.5
KI BOIS Area Transit System	Adair, Okmulgee, Cherokee, Haskell, Hughes, Latimer, Leflore, McIntosh, Sequoyah, Pittsburg, Okfuskee, and Wagonger Counties	194	155,198	472,765	4,369,880.5	5,231,233.9
Little Dixie Transit	Hugi, Idabel, Antlers, Broken Bow and Clayton	87	61,520	121,858	1,732,197.6	2,471,896.8
Muskogee County Transit	Muskogee	37	51,340	80,036	906,173.0	1,332,151.0
OSU/Stillwater Community Transit System	Stillwater	-	7,702	629,017	651,340.7	8,278,470.4
Pelivan Transit	Claremore, Grove, Miami, Owasso, Pryor, Vinita	28	107,492	104,100	1,596,048.0	2,710,647.3
Red River Public Transportation Service	Roger Mills, Beckham, Custer, Washita, Kiowa, Tillman, Cotton, Jefferson, Stephens, Woodward, Caddo, Carter, Comanche, Ellis Dewey and Canadian Counties	120	90,198	164,543	2,025,897.6	3,438,718.6
Southern Oklahoma Rural Transportation System	Bryan, Carer, Coal and Love Counties	50	87,317	98,590	871,621.0	1,351,766.6
Southwest Transit	Greer, Harmond and Jackson Counties	27	26,578	67,441	714,565.4	758,709.9
Washita Valley Transit	Grady County, Chickasha	15	22,087	16,381	206,440.0	137,153.0
Totals		821	843,723	2,220,155	18,335,304	31,022,797

Source: <http://www.okladot.state.ok.us/transit/s5311/index.htm>.

*All transit programs listed provide "demand response" service. Under this type of service a provider may vary their bus routes, hours of service and offer varying pick up and/or drop off points, as requested by the user.



Transit Exhibit

1.3.2 Tribal Transit Planning

A tribal transit program is the planning, administration, acquisition, operation and maintenance of a system associated with the public movement of people served within a community or network of communities on or near Indian reservations, lands, villages, communities, and pueblos. Tribes identify transit needs during the tribal transportation planning projects. Transit projects using Tribal Transportation Facility Program funds must be included in the FHWA-approved Tribal Transportation Facility TIP.¹³ Thus need to be included in the applicable Tribal Transportation Improvement Program (TTIP). However, to be in a TTIP the project must first be identified in the tribally adopted Long Range Transportation Plan (LRTP).

Public transit serves several different functions. It gives mobility to persons without access to an automobile and to those who do not drive. It provides important links between rural communities and metropolitan areas. In urban and rural areas, it is important in reducing traffic congestion and pollution by providing an alternative to the single occupant vehicle. It also supports Oklahoma's tourism industry by enabling visitors to access congested areas.

The demand for transit services in areas that include rural sections is considered in two components: "program" and "non-program." Program transit trips are those associated with a specific social service program (such as a senior center or a sheltered workshop), and are a function of the number of persons using the program. Non-program transit trips consist of all others, including general public trips for all purposes (work, school, shopping, recreational, occasional heritage, tourism and educational excursions, etcetera). Non-program transit trips may also include trips made for societal, heritage and entourage purposes. Trips would include Seminole lands and sites in Florida that are destinations for heritage tour groups and delegations riding to various conferences in Oklahoma City and other designated areas.

As of 2008, there is an area transit system operating within Seminole Nation jurisdiction. The Seminole Nation currently operates a public transit system serving Seminole Nation, as well as Seminole County. The system currently has eight vehicles (four are ADA compliant), with plans for further expansion as well.

1.3.3 Tribal Transportation Program

The Seminole Nation Transit Service is funded through the Seminole Nation and federal funds. It is a public system that provides rides for all people in Seminole County. They run demand response and one deviated-fixed route. At the moment, in order to be able to ride, you must schedule your trip at least 24 hours in advance. Both tribal and non-tribal members can ride, but at different rates.

¹³ Federal Register/Vol. 69, No. 137/Monday, July 19, 2004/Rules and Regulations



The vision of the Transit Department is to continue to help the citizens of Seminole county access employment, health care, nutrition, education, recreation and social and human service. They strive to be recognized as a primary contributor to the happiness and quality of life of their customers and their employees.

1.3.4 Transit Services

Perhaps the newest and most common form of regional transit in the United States is rural transit. Rural areas are difficult to serve efficiently, using conventional public transportation. But in recent years, it has been realized in many areas that not everybody can drive. And that alternative transportation must be available. Accurate estimates of demand are critical for planning, designing, and operating public transit systems. Previous research has demonstrated that the expected demand in rural areas is a function of both demographic and transit system variables.

Type of services which might be considered are a dial-a-ride system which is a ride reserved by telephone, typically a day in advance. Some dial-a-ride systems are available to the general public; other systems are restricted to senior citizens, or to people with disabilities. Other rural transit systems use scheduled fixed routes, generally operating only a few times a day, or sometimes only a few times a week. Some such fixed routes actually offer "route deviation" service, where by advance reservation, a bus may briefly deviate off the regular route to serve a specifically requested location.

1.3.5 Transit Funding Options

Title 23 of the United States Code (the organized compendium of public laws passed by Congress) authorizes the use of Tribal Transportation Facility Program funds for transit facilities. Additionally, there are many sources of Federal funds that may help support tribal transit programs. These include the Federal program listed below:

- U.S. Department of Agriculture (USDA)
- U.S. Department of Housing and Urban Development (HUD)
- U.S. Department of Labor: Native American Employment and Training
- DOT: Welfare-to-Work, Indian Reservation Roads Program
- HHS: programs for Native American elders.

Further information regarding this program can be obtained from FTA Regional Transit Assistance Program (RTAP) National Transit Resource Center.¹⁴

Section 170.152 of title 25 in the Code of Federal Regulations answers the questions, “*what*

¹⁴ <http://www.ctaa.org/ntrc>



transit facilities and activities are eligible for IRR Program funding?”¹⁵

Section 5310 Program

Section 5310, the Elderly and Persons with Disabilities Program of Title 49, United States Code offers financial assistance to enhance the transportation services specifically for the elderly and/or the disabled. The Section 5310 Program is administered in Oklahoma by the Department of Human Services.

Under this grant, the Federal Government will pay for 80 percent of the initial cost of service vehicles, communication equipment, wheelchair lifts, etc. The sponsoring agency is responsible for the remaining 20 percent of the equipment expenses, plus 100 percent of the operating costs. Vehicles purchased with funds from this grant are used primarily for transportation for the elderly, but they can also be used for other assistance programs such as “meals on wheels” or for transportation of the general public as long as the needs of the elderly and persons with disabilities are first being met. Any city, regardless of its size, can be the site for a Section 5310 program, and any private nonprofit organization can be the sponsoring agency.

There are currently 156 Section 5310 providers in Oklahoma, with over of 390 vehicles in service. Approximately 244 of those vehicles are equipped with either a ramp or a hydraulic lift, making them accessible for persons with disabilities.

Section 5311 Program

Transportation for Rural and Small Urban Areas - Section 5311 Program – Provides operating assistance for local governments, and Indian Tribes to provide transit for the general public. Capital assistance may also be provided under this program. The Tribal Transit Grant program is a new addition to Section 5311, first appearing in 2006.

1.3.6 Recent Grants

In July 2012, the Seminole Nation Tribal Transit System received a \$450,000 grant from the FTA for their American with Disabilities Act Accessibility and Program Efficiency Initiative. This initiative is to purchase new vehicles and equipment, replacing six of the vehicles with high maintenance costs and mileage. The new vehicles will be ADA approved wheelchair accessible ones. The grant will also allow for construction of modal facilities for passengers to wait at. There will also be upgraded equipment allowing for better tracking of riders, vehicles and staff. This equipment includes mapping and scheduling programs.

¹⁵ 25 CFR §170.152 first appearing in 69 Federal Register (July 19, 2004) at pages 4311 and 43112



In November 2012, the Seminole Nation Tribal Transit System was awarded a \$277,000 Section 5311 grant from the Federal Transit Administration.



1.4 Existing Traffic Volume

The measurement of traffic volumes is one of the most basic functions of roadway planning and management. Traffic volume counts are the most common measure of roadway use, and they are needed as input to most traffic engineering analysis. The objectives of a traffic volume study are to estimate the Annual Average Daily Traffic volumes (AADT) and peak-hour traffic on any routes affecting traffic within the Nation and other public roads within the TTF system. This data is used to update the road inventory files, determine capacity deficiencies, and identify potential roadway improvement projects.

Short Duration Counts

The short count program is designed to provide roadway segment-specific traffic count information on a cyclical basis. Average daily traffic (ADT) is defined as the sum of all traffic, in terms of vehicles per day (vpd), passing a specific point during a given time period (in whole days), greater than 1 day and less than 1 year, divided by the number of days in that time period. Except for permanent count stations maintained by various highway agencies, the ADT for most locations is estimated based on counts taken over a relatively short period of time.

Vehicle Classification Counts

The objective of the short duration classification count program is to ensure that the agencies have valid truck volume information for roads. The classification counts use the standard FHWA 13 vehicle categories.

1.4.1 Methodology

TEC conducted mechanical twenty-four hour traffic volume counts on the Seminole Nation between July 26, 2011 and August 18, 2011 at 195 locations as part of an inventory update in 2011.

Traffic volumes derived from these traffic counts were used to compute current and projected (20-year) ADTs. Once the current ADTs were generated, projected (20-year) ADTs were computed. The Bureau of Indian Affairs Department of Transportation (BIADOT) has established a growth rate of 2% per year for BIA inventory purposes. Future ADTs was computed by multiplying the current ADTs by a factor of 1.485. This factor represents a compound traffic growth rate of two percent per year for 20 years.



1.4.2 Result of Traffic Study

The results of the mechanical twenty-four hour traffic counts are summarized on the Table “Seminole Nation Traffic Counts”. Route maps were developed illustrating the location of each traffic count. Both of these items are contained in *Appendix E*. The exhibit illustrating Annual Average Daily Traffic for Seminole County, prepared by Oklahoma Department of Transportation 2010, is also found in *Appendix E*.



1.5 Trail and Path System

There are other factors that affect the transportation system when roadway paths are incorporated into an area. These factors need to be taken into consideration when road construction projects are proposed; the most important factor being right-of-way. When a path is proposed within the right-of-way of a Tribal Transportation Facility (TTF) Route – coordination and application must occur to ensure all design and safety standards are being met. Some of the standards include:

Bike lanes and routes – If a shoulder is identified as a bike route or path, although not signed as a bike lane, obstructions shall not be allowed to encroach into the shoulder.

Street resurfacing - Streets which have on-street bike facilities should be given additional weight for resurfacing when resurfacing priorities are set.

Street Maintenance – One of the most frequent complaints of path users is the accumulation of debris. Streets which function as paths or have bike lanes will need to be swept more frequently.

Public safety – a comprehensive public information campaign to alert car drivers to the rights of others on the roadways (cyclists, trail users and pedestrians) needs to be addressed. The campaign should also inform pedestrians and cyclists as to their rights and responsibilities on roadways.

Design Standards – “Every street and highway on which bicycles are permitted to operate is a ‘bicycle street’ and should be designed and maintained to accommodate shared use by bicycles and motor vehicles.”¹⁶

1.5.1 Recreational Trail Program

Extensive bicycle and pedestrian trail systems are under development in Oklahoma’s two major metropolitan areas – Oklahoma City and Tulsa – as well as a statewide Rails-to-Trails program.

The Recreational Trail Program (RTP) is a state-administered, federal-aid program managed through the Oklahoma Tourism and Recreation Department and the Federal Highway Administration. This program was part of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, was included in SAFETEA-LU and is now in MAP-21. So far, Oklahoma has granted almost seven million dollars for statewide trail projects. The RTP is a reimbursement-type grant program. The program provides for an 80 percent federal share and 20% non-federal share for each project. Additional federal funds may be used to provide up to 95 percent of the total project amount. Reimbursable project costs include land

¹⁶ The American Association of State Highway and Transportation Officials (AASHTO), Washington, DC, 1991



acquisition, labor and material costs, service contract, design and engineering services and purchase or rental of equipment.

The value of any donated items can also be included. Donations from the private sector (land, materials, or labor), may only be attributed to the sponsor's match.



Applications for trail programs will be accepted from city and county governments; state agencies; other governmental bodies created under state law; Federal land managers (i.e. U.S. Forest Service, Corps of Engineers); and private 501(c)(3) organizations.

The Oklahoma Trails Advisory Board consists of nine members, six of whom represent various types of trail use statewide, one representing disabled access, and two at-large members. Project applications are scored by the OTAB by using the Project Priority Rating System. The highest scoring applications are approved until available funds are exhausted.





1.5.2 Trails and Paths

Off-street facilities, better known as shared-use paths or trails, should serve areas that are not adjacent to streets and highways. The most favorable locations for these facilities are often found along parkways, streams, and in park and recreation areas. An off-street path will be preferred if it provides better connections, is more scenic, is a more efficient transportation route than an on-street facility and doesn't pose a hazard at intersections. These paths should be at least ten feet wide with adjacent, soft shoulders for joggers and horses, as appropriate.

Community wellness and recreation

To provide Seminole members and residents with safe, diverse, well-marked, and attractive options for traveling between and among community destinations and for enjoying outdoor fitness and recreation.

Transportation system expansion, enhancement, and diversification

To complement the existing network of roads and bridges with safe, accessible, intermodal options for movement within and across Seminole lands.

Tourism-focused economic development

To increase revenues and employment opportunities by expanding the number and diversity of recreational and interpretive opportunities – both guided and unguided – for visitors to Seminole.

Preservation-focused trail identification, documentation and protection

To return to service the most useful portions of the vast trails networks centered on Seminole communities.

1.5.3 Pedestrian/Bicycle Facilities

Bicyclists and pedestrians can be grouped into at least three groups, and the appropriate facilities should be provided for each.

Group A – Skilled Cyclists

Skilled cyclists are experienced riders who usually prefer riding on roads, which for them often feel safer and more efficient than off-street paths. They are interested in using off-street paths only if the paths allow for separation between bicyclists and pedestrians, are designed to allow for higher speeds, and offer a more direct route than the nearest alternative on-street route.

According to Oklahoma State Law, a bicycle is a vehicle, and cyclists are entitled to share the roadway with other vehicles except where expressly prohibited. Roadway improvements



should be able to accommodate bicyclists whenever it is economically feasible and wherever cycling is permitted.

Group B – Less Skilled, Youthful, or Family Cyclists

These cyclists are uncomfortable in traffic. They may be cycling either for recreation or transportation, traveling at slower speeds, taking shorter trips, and not be able to handle steeper grades. They may also require frequent rest stops.

Most parents discourage younger, less experienced cyclists from cycling on roads. When properly designed, bike paths can provide more appropriate routes for this group. Paths that are designed to bypass highways and busy streets and provide direct connections between parks, open space, schools, recreation centers, shopping, and other youth-oriented destinations are especially useful.

Family cyclists often have young children in trailers, in bike seats, or following on small bikes. Residential streets, bike lanes, or sidewalks often provide linkages to off-street bike paths. When these linkages are not feasible, these cyclists often drive to trail head parking to access a path.

Group C – Pedestrians

Walkers, joggers, skateboarders, in-line skaters and roller skaters are the “slower speed” users of sidewalks and paths. They generally can, and often do, change their speed and direction suddenly, leaving bicyclists insufficient time to react to avoid collisions.



1.6 Airports

Access and infrastructure are important ways to lure and promote economic development in all corners of Oklahoma. There are always much-needed improvements to airports.

1.6.1 Airports and Heliports

Two major international airports serve Oklahoma – Will Rogers World Airport in Oklahoma City and Tulsa International Airport in Tulsa. These two airports are the primary air cargo facilities in the state. The following table contains the listing of airports and heliports available in the Seminole Nation of Oklahoma.

Table 1.16
Airports on the Seminole Nation of Oklahoma

Name	City
Seminole Municipal Airport (Jimmie Austin Municipal Airport) 5,000 ft lighted runway, hangar facilities for 50 aircraft	Seminole

Source: Internet/Airports



Table 1.17
Heliports Available on the Seminole Nation of Oklahoma

Name	City	Use
Columbia Seminole Heliport	Seminole (2 miles northwest)	Medical
Seminole Municipal Airport (Helipad)	Seminole	Medical/Other

Source: Internet/Airports



1.7 2012 Tribal Residents Roads Study

A project was conducted using public involvement titled 'Pin Your Roads.' The main objective of this project was to locate where tribal members live in Seminole Nation. The secondary objective was to locate those tribal members's area of work, primary shopping areas as well as the route they travel to go out of the nation most frequently. The purpose of this project was to not only find the higher density clusters of tribal members in the nation, but to identify the roads that they frequently travel. Once the identification of the roads is made, an assessment can be made of the roads and their conditions. From there, road projects are suggested and created for future work. Suggestions, comments, and opinions were also welcomed from the public as to the state of the roads or about what projects should be done in the nation.

During the course of this project from September 2012 to December 2012, 115 residents participated. The total household count from these participants was 381 people.

The assessment of the roads included taking note of the condition that the roads are in as well as the surface type. Once the assessment is made and the need for repairs or resurfacing is determined, then a future projects list is compiled. This list will be for after the five year priority list is completed. This is not set until funding can be allocated and needs are assessed and it can be modified. Reference materials to this can be found in Appendix F.

Included in the study was data gathered from local schools on where their school bus routes were throughout the Nation. There was also housing data provided by the Seminole Housing Authority as well as key emergency routes from Fire and EMS departments.



PART TWO THE TRANSPORTATION PLAN



2.1 Future Development

2.1.1 Tribal Goals and Objectives

The Nation continues to acquire land and businesses in Seminole County. The Nation recently purchased the Grisso Mansion, which is on the National Registry of Historic Places. It is located in the City of Seminole, just off Wrangler Boulevard, also known as State Highway 9.

2.1.2 Development Plans

The type and degree of development projected by the target year 2032 in the Nation are based upon the information provided by tribal representatives and staff. This data was used to project traffic volumes that would likely be generated by the various land uses and, subsequently, to identify road and other transportation-related improvements that may be needed to handle that traffic

Strategies outlined by the Nation and related studies include:

Commercial: The Seminole Nation Casino is located at the I-40 Interchange with State Highway 99 (North end of the County). The Nation has plans to increase the number of machines in the casino. There are also plans to potentially add a hotel to the site. New eating facilities are also planned at the casino/hotel. As of June 2012, the construction process began for the first phase.

A commercial property will be developed on recently purchased land in Konawa at River Mist.

Churches and Ceremonial Grounds: There are plans to create a cemetery with a small chapel at Mekusuky Mission.

Cultural: An Immersion School is being developed using an existing building structure. The purpose of the school is to teach more about tribal culture and history as well as how to speak the native language.

Health: A Multipurpose Community Health and Wellness Facility have been planned for Mekusuky Mission. It will house three different health programs in separate buildings.

Land Purchase: The Nation is pursuing additional land purchases within the area.



2.2 Projected Travel Demand

In its most basic form, travel demand is a measure of the number of people (or their vehicles) who travel to and from all the various possible locations within and outside of a given area. That travel must take place on a transportation system or network, in this case, a road network. Projection of travel demand has three components: trip generation, trip distribution, and trip assignment.

The type and degree of development projected for the year 2032 on the nation or in its vicinity is based on information provided by tribal members, staff and other officials or agencies.

In developing a 20-Year Transportation Plan for the community, we have made assumptions based upon the awareness of the existing conditions and of the plans to meet current and future needs. Using these assumptions, we have projected the degree of development that is probable by the year 2032 given the population to be served and the economic resources available for implementing development plans.

The road network must accommodate existing as well as projected traffic volumes that can be determined through present and projected growth patterns.

2.2.1 Trip Generation

The most reliable way to estimate the traffic generated by a proposed development is to use the trip generation rates observed at an existing development of similar land use and building type. For this purpose, the accepted source document of trip generation rates (Trip Generation, Sixth Edition - Washington, D.C., Institute of Transportation Engineers, 1997) was used.



The following table illustrates typical land use categories on Indian Reservations.

**Table 2.1 Trip Generation Rates
Typical Indian Reservation Land and Use Categories**

Land Use	ADT Rate
Residential	10 trips/day/dwelling
Community Center	22.88 trips/day/1000 sq. ft.
Light Industrial	6.97 trips/day/1000 sq. ft
Commercial (Shopping Center)	42.92 trips/day/1000 sq. ft.
Commercial (Convenience Market)	737.99 trips/day/1000 sq. ft.
Commercial (Fast Food Rest.)	496.12 trips/day/1000 sq. ft.
Health Clinic	31.45 trips/day/1000sq. ft.
Campground/RV Park	74 trips/day/acre
Community Park	12.14 trips/day/acre
Elementary School	12.03 trips/day/1000 sq. ft.
High School	13.27 trips/day/1000 sq. ft.
Bingo*	64 trips/day/1000 sq. ft.
Casino*	521 trips/day/1000 sq. ft.
Poker Room*	64 trips/day/1000 sq. ft.

Source: Trip Generation, 6th Edition, Institute of Transportation Engineers (ITE), 1997

**No trip rates are available from ITE for similar full service casinos that are often seen on Indian Reservations. Trip estimates were based on Casino of the Sun Traffic Impact Analysis, March, 2001.*

Trip generation calculations were performed for average weekday trips and weekday AM and PM peak-hour trips for the year 2032. This information is used to develop recommendations for road improvement programs. Future volumes, including programmed improvements, are analyzed against the capacities of existing roadways to develop road improvement projects. Table 2.2 shows the results of the trip generation calculation for the year 2032 for the proposed development on the Seminole Nation.

**Table 2.2
Trip Generation: Year 2032**

			Trip Generation Rates				Trips Generated					
			Daily	AM PK HR		PM PK HR		Daily	AM PK HR		PM PK HR	
Land Use	Intensity	Units		In	Out	In	Out		In	Out	In	Out
2032												
Hotel/Restaurant	300	Rooms	13.43	0.72	0.28	0.43	0.57	4,029	2,900	1,128	1,732	2,296
Casino	3	1,000 sq Ft	521	0.50	0.50	0.50	0.50	1,563	781	781	781	781
Convenience Store	1	1,000 sq Ft	737.99	0.50	0.50	0.50	0.50	738	369	369	369	369

Intensity/Units are Estimate Numbers



2.3 Recommended Transportation Plan

The recommended 20-year transportation plan for the Seminole Nation consists of an integrated set of roadway improvement/construction projects needed to meet current and projected housing and economic development goals within the Seminole Nation and identifies the governmental agency responsibilities for carrying out the plan.

2.3.1 Evaluation Criteria

The following criteria were used in evaluating the various roadway alternatives developed during the course of this study. The criteria are divided into four sections: Traffic Operations, Community Impacts, Economic Impacts, and Construction.

Traffic Operations

Traffic Operations – This is a measure of traffic operational characteristics. Objective measures include capacity, level of service, delay, and progression efficiency.

Network Completion – This measure assesses whether or not the project closes gaps in the transportation network.

Traffic Safety – Traffic safety is a measure of expected conflict points and improvement of existing problems.

Community Impacts

Displacement – This is a measure of the magnitude of displacement that would be necessary to construct the project.

Aesthetics – This measure assesses whether the project is visually pleasing.

Environmental Impact – This is a measure of each project's impact on the environment, including noise, air quality and wetlands.

Community Support – This is a measure of how much opposition or support there may be for the project.

Economic Impacts

Local Access – This criterion measure the level of directness, convenience and availability of access to existing and future development. Emergency access is included in this measure.

Economic Development Opportunities – This criterion assesses the impact of the project on future development opportunities (i.e. does the project change or encourage the potential for access for future development?).

Construction



Ability to Phase – This measure assesses whether or not the project lends itself to being constructed in phases, or if it would have to be constructed as one project.

Constructability – This is a measure of how difficult it would be to construct the projects, looking at the need to relocate utilities, change drainage facilities, or alter a railroad crossing.

Relative Cost – This is a comparison of costs to obtain any necessary right-of-way and to construct improvement for the project.

Right-of-Way - This measure assesses the availability of right-of-way for the project and the potential costs associated with right-of-way acquisition.

2.3.2 Transportation Improvement Program (TIP)

A Tribal TIP is a multi-year, financially constrained, list of proposed transportation projects to be implemented within or providing access to Indian country during the next 3 to 5 more years. The Tribal TIP is consistent with the tribal Long-Range Transportation Plan and must contain all TTF funded projects. It may also contain information regarding other Federal, State, county, municipal, and tribal transportation projects initiated by or developed in cooperation with the Indian Tribal Government. Only those projects approved for funding by the sponsoring governmental entity may be included in the Tribal TIP. It is reviewed and updated as necessary. The only entity that can change the Tribal TIP is the Indian Tribal Government.

Examples of transportation projects include, but are not limited to: New road construction, road reconstruction/resurfacing, road sealing, bridge construction, transit facilities, bike/pedestrian enhancements, highway safety, etc.

The Tribal TIP identifies the implementation year of each project. The development of the Tribal TIP establishes tribal priorities for TTF and other transportation projects. It is the Indian Tribal Government's voice in selecting the year in which projects are programmed. It is also a useful tool for keeping track of transportation projects programmed by other government agencies i.e., Federal Transit Administration (FTA), Federal Highway Administration, Federal Aviation Administration, etc. and coordinating them with TTF transportation projects. By developing a Tribal TIP, the Indian Tribal Government is taking a pro-active role in the transportation planning process and exercising its sovereignty in controlling the programming of transportation projects on tribal land.

The TTFTIP is prepared by the Regional BIA Office. It is a list (by year) of TTF funded projects, selected by Indian Tribal Governments through tribal TIPs, or other tribal actions, that are programmed for construction in the next 3-5 years. The TTF projects identified on the Tribal TIP must be included in the Region's TTFTIP without further action, subject to air quality conformity determination.



The Bureau of Indian Affairs (BIA) Regional Office places the TTF information from Tribal TIPs into the Regional Tribal TIP unchanged.

The Regional TTF TIP is included in the Statewide Transportation Improvement Program (STIP) developed by each State Transportation Agency without further action. If a TTF project lies within a metropolitan area, it must be included in the metropolitan area TIP without further action.

The BIA Regional Office updates the TTFTIP annually for each state in its service area. The process begins by providing the projected TTF Program funding amount to each Tribe. The BIA region/agency office receives a Tribal TIP from each Indian Tribal Government.

A BIA analysis of the Tribal TIP results in anticipated project costs and proposed scheduling of construction activity based on the tribe's percent share of the region's TTF budget. The BIA reviews the programming of proposed projects with the Indian Tribal Government and agreed upon adjustments are made.

The BIA Regional Office then updates the region-wide control schedule for its service area, to include TTF projects from Tribal TIPs and the selected projects from the tribal list. The BIA Regional Office then produces a TTFTIP for each State in its service area from the area wide control schedule for signature by the Secretaries of Interior and Transportation or their designees. The revised area wide control schedule is provided to the BIA, Division of Transportation (BIADOT) for review and comment

The timeframe for the annual update of the TTF TIPs for each State in a BIA Regional Office's service area should be coordinated with the State Transportation Agencies within its service area. This will ensure that approved TTFTIP updates are included with the STIPs when they are printed and distributed.

2.3.3 Transportation Improvement Program 2011-2015 Identified Projects

The Seminole Nation has previously identified seven (7) projects on the Tribal Transportation Improvement Program Federal Lands Highway Program, 23 USC 204. This is for fiscal years 2011-2015. The following table illustrates those projects. At this time, Seminole Nation will need to determine if there are any additions or deletions to the TIP. The Tribal Council will eventually approve the project list and a Tribal Resolution will be prepared.



**Table 2.3
Transportation Improvement Program 2011-2015 Projects**

	Project ID Route No(s)	County Agency	Project Name Length Roads mi / Bridges m	Type of Work	Project Totals						
					FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2011-2015	
1	10106	Seminole	Snake Creek Rd	Recons	PE \$130,127	\$0	\$0	\$0	\$0	\$130,127	
			Wewoka	3 miles	G1010106	CE \$0	\$0	\$0	\$0	\$0	\$0
							Con \$1,093,979	\$0	\$0	\$0	\$1,093,979
							\$1,224,106	\$0	\$0	\$0	\$1,224,106
					\$0						
2	20121	Seminole	Mekusukey Mission Entrance	Recons	PE \$0	\$0	\$0	\$291,500	\$0	\$291,500	
			Wewoka	0.25 miles	G1020121	CE \$0	\$0	\$0	\$0	\$507,225	\$507,225
							Con \$0	\$0	\$0	\$0	\$0
							\$0	\$0	\$0	\$291,500	\$798,725
					\$507,225						
3	20311	Seminole	EW133 Road	Recons	PE \$0	\$0	\$0	\$0	\$41,500	\$41,500	
			Wewoka	0.2 miles	G1020311	CE \$0	\$0	\$0	\$0	\$0	\$0
							Con \$0	\$0	\$0	\$0	\$255,457
							\$0	\$0	\$0	\$0	\$296,957
					\$255,457						
4	92709	Seminole	Rolling Meadows	Recons	PE \$118,000	\$0	\$0	\$0	\$0	\$118,000	
			Wewoka	0.9 miles	G1092709	CE \$25,000	\$0	\$0	\$0	\$0	\$25,000
							Con \$544,200	\$0	\$0	\$0	\$544,200
							\$687,200	\$0	\$0	\$0	\$687,200
					\$0						
5	92809	Seminole	Retreat House Road	Recons	PE \$443,659	\$24,557	\$40,000	\$0	\$0	\$508,216	
			Wewoka	1.9 miles	G1092809	CE \$0	\$0	\$0	\$0	\$0	\$0
							Con \$20,000	\$1,195,138	\$668,994	\$695,868	\$0
							\$463,659	\$1,219,695	\$708,994	\$695,868	\$3,088,216
					\$0						
6	92909	Seminole	Econtuchka	Recons	PE \$0	\$0	\$255,701	\$40,000	\$0	\$295,701	
			Wewoka	.75 miles	G1092909	CE \$0	\$0	\$0	\$0	\$0	\$0
							Con \$0	\$0	\$255,000	\$192,327	\$0
							\$0	\$0	\$510,701	\$232,327	\$743,028
					\$0						
7	M2000	Seminole	Seminole Road Maintenance	Rehab					\$415,513	\$415,513	
			Wewoka	0 miles	G10M2000	Z \$0	\$0	\$0	\$0	\$0	\$0
							\$0	\$0	\$0	\$0	\$415,513
					\$415,513						
+	State Totals:				\$2,374,965	\$1,219,695	\$1,219,695	\$1,219,695	\$1,219,695	\$7,253,745	

Source: Indian Reservation Roads Transportation Improvement Program – June 2012



2.3.4 Oklahoma Department of Transportation (ODOT) Construction Projects

The Statewide Transportation Improvement Program (STIP) is a financially constrained program which details the utilization of Oklahoma's federal and state transportation funds appropriately for regionally significant projects requiring federal action. It includes a list of priority transportation projects to be carried out in a four (4) year period. The purpose of the STIP is to educate the public on future transportation projects and to assure that federal funds are spent on projects selected from approved long range plans.

The STIP was developed under the guidelines provided by the Transportation Equity Act for the 21st Century (TEA 21), passed by Congress in 1998. The purpose of TEA 21 was to build on initiatives established in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). The new act combines the continuation and improvement of current programs with new initiatives, to meet the challenges of improving safety, as traffic volumes continue to increase.

Federal revenue for public transportation and roads will now be determined by the new federal public law entitled: Moving Ahead for Progress in the Twenty-First Century Act (MAP-21) which was passed by Congress on June 29, 2012 and signed into law by President Obama on July 6, 2012. The 2011-2014 STIP was developed under the guidelines provided by SAFETEA-LU, but funding guidelines will follow those developed under MAP-21 under a transition formula.

The Oklahoma Department of Transportation is committed to a statewide system integrating all transportation modes, and the STIP assists in achieving a system that provides for the safe and efficient movement of people and products.¹⁷

The Seminole Nation falls within the boundaries of Division 3 of Oklahoma Department of Transportation's construction program and work plan. As indicated on the following exhibit (2011 to 2014 Statewide Improvement Program), the following projects have been identified by the ODOT for construction within the boundaries of Seminole County.

1. US270B - US-270B over unnamed creek, 0.6 mi west of SH-56- bridge & approaches (2012)
2. US270- US-270 over Wewoka creek & railroad, from 8.3 mi east of SH-270A in Seminole, east 1.2 mi- right of way (2013)
3. US270- US-270 over Wewoka creek & railroad, from 8.3 mi east of SH-270A in Seminole, east 1.2 mi -utilities (2013)

¹⁷ Statewide Transportation Improvement Program FFY 2011-2014– Oklahoma Department of Transportation, October 2010



2.3.5 National Corridor Planning and Development Program

The National Corridor Planning and Development Program (NCPD) is a discretionary fund of the U.S. Secretary of Transportation used to plan, design, construct, and maintain the NHS High Priority Corridors. According to Oklahoma Department of Transportation long range plan, for FYs 2010-2017, the construction work plan has approximately \$238 million¹⁸ in improvements programmed for its NHS High Priority routes.

Seventeen Corridors have been identified as Transportation Improvement Corridors. These Corridors may coincide with the National High Priority Corridors but generally are separate. Most of the corridors selected are projected to be four-lane highway facilities; however some facilities may need six or more lanes to adequately handle projected traffic. The State Transportation Improvement Corridors for the *2010 – 2035 Oklahoma Statewide Intermodal Transportation Plan*, pertaining to the Seminole Nation are as follows:

(4) **SH 9** from the junction with Interstate 35 in Norman, Cleveland County east to the junction with SH 99 in Seminole, Seminole County a total of 48 miles; and

(5) **US 270** from the junction with SH 9 in Seminole: Seminole County southeast to the east junction with US 270 Bus. in Holdenville, Hughes County, a total of 23 miles.

2.3.6 County Improvement for Roads and Bridges (CIRB) Plan for Seminole County

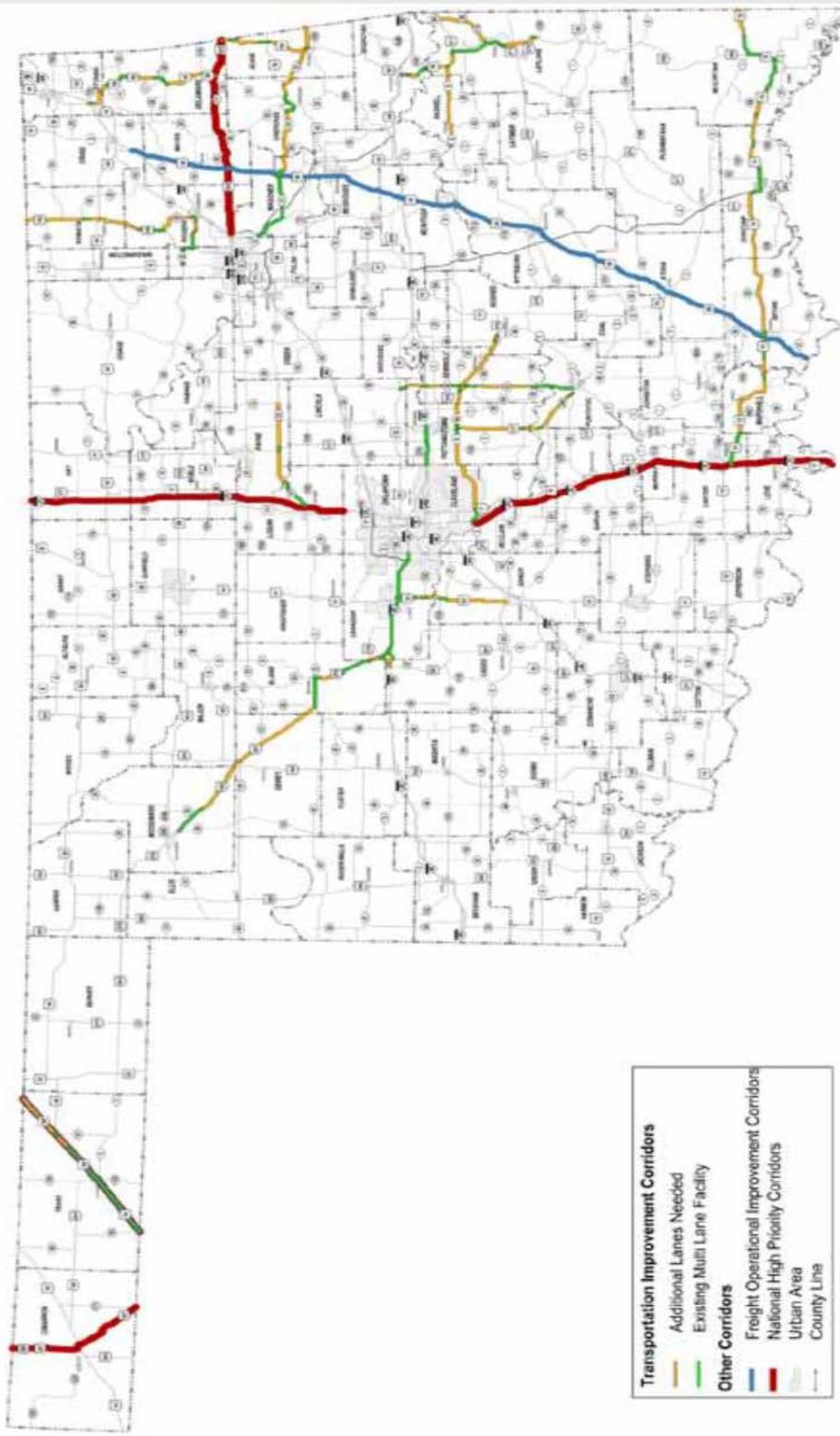
The CIRB Committee of Circuit Engineering District 4 met in October of 2012 to approve the five year allocation plan for ODOT Division III which includes Seminole County. The following table contains the projects designated by the county with funding allocated to it.

Table 2.4 CIRB Work Program 2013-2017

Project	2013 Funds	2014 Funds	2015 Funds	2016 Funds	2017 Funds	Total
EW 119 East End	\$1,000,000					\$1,000,000
Local Bridge #44		\$375,000				\$375,000
Brick Plant Access Assurance		\$2,000,000				\$2,000,000
Market Road			\$2,650,000			\$2,650,000
Construct Bridge #97				\$750,000		\$750,000
Construct Bridge #209				\$625,000		\$625,000
Tate Mountain Road Completion					\$1,369,157	\$1,369,157
Total Allocated						\$8,769,157



TRANSPORTATION IMPROVEMENT CORRIDORS



2035 Statewide Intermodal Transportation Plan



2.3.7 Tribal High Priority Projects Program

The Tribal High Priority Projects Program comes from Section 1123 and is allocated \$30 million from the general fund. It calls for project applications within 60 days of funding and there is a maximum of \$1 million per project. It can be used by a tribe whose annual allocation is insufficient to complete its highest priority project by any tribe for an emergency/disaster on any IRR transportation facility. Eligible applicants may have only one application pending at any time. This includes emergency/disaster applications. The funds cannot be used for transportation planning, research, or routine maintenance activities. The Tribal High Priority Projects Program is separate from the Tribal Transportation Program under MAP-21.

2.3.8 Tribal Transportation Facility Maintenance Funding

The BIA is obligated by CFR 25, Part 170, to maintain the TTF Road System to a safe and satisfactory standard based on the availability of funds and the road's as-built condition. Road maintenance funds are appropriated by Congress and allocated to the BIA separately from the Federal Highway Trust Funds (HTF) used for initial construction. Road maintenance funds are used to provide an optimal level of road maintenance based on the road condition and the availability of funds. Road Maintenance activities include: the preservation and repair of the road surface, blading roadway shoulders and ditches, clearing drainage structures, snow removal and the installation/replacement of traffic control, directional and street signs.

Typically the Agency Road Engineers/Managers work with the tribes in establishing a road maintenance program to determine the type and level of maintenance to be performed on BIA roads within each reservation based on Agency's road maintenance budget. Maintenance priorities are frequently determined by weather and/or road conditions which inhibit access to and from communities to employment centers, community services and health facilities. Emergency road conditions have highest priority. Other priorities are determined based on surface type and use.

If roadways funded and constructed with HTF are not properly maintained, then future HTF road construction funds can be withheld. This situation might occur if maintenance funding is limited such that adequate repairs and upkeep of the roadway are not possible.

2.3.9 Revisions to Tribal Transportation Facility Road System

One of the objectives of this transportation study was to identify reservation roads that should be added to or deleted from the TTF system, or renumbered to more logically reflect their relationships with intersecting roads. The following sections identify the recommended changes to the TTF Seminole Nation Community road system.



Listed below are recommended Road System Guidelines, intended to assist Tribes, Regional Directors, and engineers in deciding which roads should be on the BIA Road System. These are not rules, as special circumstances may apply, but deviations from the guidelines should be accompanied by an explanation of the special circumstances.¹⁹

1. A road which is only for service to a single residence or land use is a private driveway, not a public road, and should not be on the BIA Road System. A road serving only three or less closely grouped residences or land uses should be considered a common private driveway.
2. Roads primarily used for a single purpose should not be on the TTF Road System such as:
 - a. Logging roads for timber sale, administrative, or fire access only and which are not open to the public or used for such purposes as recreation, wood cutting, gathering, fishing, or hunting.
 - b. Agricultural roads to fields, pump houses, headgate, dams, along canals and which are not open for other purposes such as fishing, boating, and hunting.
 - c. Administrative roads to power plants, sewage treatment plants, water towers which are not open to the public for other uses.
 - d. Tribal roads to a single purpose tribal enterprise such as a fish hatchery, saw mill, manufacturing plant, cemetery, or other single use which are not open to the public.
3. The proportion of state and county road miles to TTF Road System road miles within a reservation should be at least equal to the proportion of fee land to trust land within that particular reservation. BIA should not participate in state or county road construction projects on a reservation unless the local governments meet their own road construction responsibilities.
4. Where state/county road systems are substantially under guideline #3, efforts to correct the imbalance and/or secure state/county funding for BIA road construction projects should be documented, with copies to the Regional Office and Central Office Division of Transportation. This also applies to cases where the state/county established a road system, but fails to meet construction needs on that system.
5. Use Class 11 trails to separate pedestrian (especially school) traffic, and bicycle traffic from vehicular traffic.
6. The following are to be considered when evaluating what is “vital to the economic development” of Indian Tribes.

¹⁹ April 4, 1994, Memorandum from the Deputy Commissioner of the Indian Affairs, recommending BIA Road System Guideline.



- a. Connects active center of population;
- b. Promotes development of natural resources;
- c. Contributes to industrial activity;
- d. Contributes to economic development;
- e. Provides jobs for the community;
- f. Contributes to law and order;
- g. Removes isolation;
- h. Provides access to education;
- i. Provides access to hospital facilities;
- j. Contributes to accident prevention;
- k. Provides access for emergency services.



2.4 Plan Implementation and Updating

This transportation plan presents the results of studies completed in 2006/2007 and 2011/2012. It reflects the current requirements for transportation facilities to satisfy the Community's needs and is based upon the existing conditions and anticipated future development within the Community and Tribal Priorities. The plan should not be thought of as a static document. It should be viewed as a dynamic document capable of being modified to meet changing social and economic development demands.

It is recommended that the Seminole Nation adopt this plan and use it as the basis for programming and budgeting road construction funds. The plan should be reviewed by the Nation and BIA Eastern Oklahoma Regional office on an annual basis to keep up with changes in Community development that may warrant a change in the project listing and/or a change in a project's priority. Changes in the project listing should be coordinated with, and accomplished within the time frames established by the funding agency so as not to hamper the implementation of the agency's road improvement program on the Community. The overall Community transportation plan should be reviewed and updated every five years, or when there are major changes in the Nation's land use plan. Five year updates are currently planned by the BIA.

A key component in the continuation of the transportation planning process is the annual coordination between the Nation and the BIA Eastern Oklahoma Regional Office, regarding adjustments in road construction priorities and implementation schedules, road maintenance needs and priorities, and TTF program funding. The Transportation Department reports and makes recommendations to the tribal Road Committee who sponsors the recommendation for a Tribal Resolution before the vote of the Nation's General Council. However the process is handled, it is recommended that: (1) it to be an annual function with a formalized process, and (2) an official tribal body (as discussed above) is assigned which has the responsibility to undertake this coordination.



2.5 Procedures for Development Roads

In the future, it is possible that roads will be constructed using funds from developers who will benefit from the road construction. Therefore, it is important that the tribal government establish policies and guidelines to monitor and control the construction of roads by developers. It is the recommendation of this study that the Nation consider this approach to funding development roads. Should such an approach be acceptable, the Nation should adopt a process for approving these roads to insure that they will be constructed to an adequate standard and properly maintained. The essential elements of such a process are outlined below.

2.5.1 Design Standards

The first element in the process is to define what is expected. When a development project is submitted for review, it should only be given conditional approval subject to the roads and other infrastructure improvements being constructed to proper standards. Roads should be designed to meet minimum geometric and structural standards for the anticipated traffic volumes and classification of vehicles' loads. Roadway design standards should be adopted by the Nation and made available to potential developers. Standards currently used by the BIA, ODOT and AASHTO are readily available. These design standards could be adopted as is, or modified, as the Nation would prefer for specific design items.

2.5.2 Plan Submittal and Review

The second element in the approval process is the submittal and review of construction documents (Plans and Specifications). The Nation employs an experienced engineer to review proposals and insure that the plans are in accordance with minimum design standards. The BIA should be asked to review and approve road construction documents from a developer if the Nation anticipates it will request that the road be added to the BIA or the Nation's road system for long-term maintenance. Plans and specifications should be approved for construction only when they are in conformance with minimum design standards based on anticipated traffic and loads.

2.5.3 Construction Monitoring

Another essential step in the process is the monitoring of the actual construction. The construction should be inspected periodically by a qualified representative of the Nation to insure that construction is proceeding in conformance with the approved plans. A final inspection should also be performed prior to accepting the responsibility for maintenance. To insure proper construction, most jurisdictions require that the developer post a performance bond. The bond is held until the roadway has been accepted and all conditions for release have been met.



2.5.4 Maintenance Funding

The process should also address a method for financing the long-term maintenance of these development roads. A desirable procedure would be to make those who benefit from the road responsible for the long-term maintenance. If a road is primarily for the benefit of the adjacent tenants, then the Nation would need some form of revenue generated by the tenants.

This could be in the form of an annual assessment or fee for the use of roads, and other non-revenue generating components of the infrastructure. This revenue would be very similar to an ad valorem tax assessed by most municipalities against the value of land. The funds received should be put in a sinking fund that would accumulate and be available for maintenance as needed.

It is the responsibility of the county and the cities to maintain the roads which the Nation builds in their respective jurisdictions. This is because the Nation is required to build the roads to AASHTO, FHWA or State Standards, whichever apply, in each case.