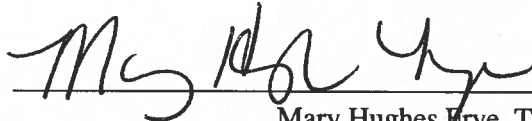


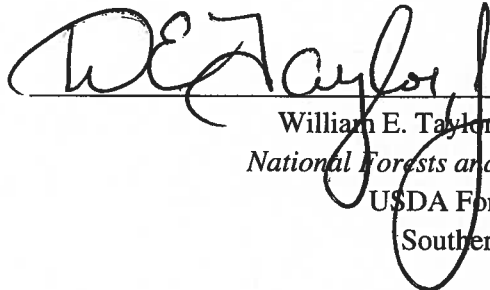
National Forests and Grasslands in Texas
Transportation System Analysis
Process (TAP) Report

December 12, 2016

Recommended by:

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National Forests and Grasslands in Texas
Transportation System Analysis Process (TAP) Report
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A. Executive Summary

Objectives of the National Forests and Grasslands in Texas (NFGT) Transportation System Analysis Process (TAP)

The objectives of forest TAP conducted over the past year were to:

- **identify key issues** related to forest's transportation system, in particular affordability and cumulative effects;
- **identify benefits, problems and risks** related to the forest's transportation system;
- **identify management opportunities** related to the existing transportation system to suggest for future consideration as National Environmental Policy Act (NEPA) decisions (examples included items such as road decommissioning within priority watersheds and needed aquatic passage improvement projects);
- **create a map to inform the identification of the future Minimum Road System (MRS); and**
- **indicate the location of likely unneeded roads and possible new road needs.**

(Note: Forest Service regulations at 36 CFR 212.5(b)(1) require the Forest Service to identify the **minimum road system** needed for safe and efficient travel and for administration, utilization, and protection of National Forest System (NFS) lands.)

Analysis Participants

The TAP was conducted by an interdisciplinary team with extensive internal participation, and limited participation by partners and the general public. The primary participants were:

Supervisor's Office:

- | | |
|--------------------|---|
| 1. Steven Lewis | Engineering Program Manager |
| 2. Dave Peterson | Fisheries Biologist |
| 3. Nancy Snoberger | Recreation Program Manager |
| 4. Tom Philips | Botanist |
| 5. Juanita Garcia | Archaeology Program Manager |
| 6. Sheila Sprague | Planning Specialist |
| 7. Karen Mitchell | GIS Specialist |
| 8. Marsue Lloyd | Civil Engineer (USDA Forest Service - Savannah River) |

Angelina Sabine:

- | | |
|-------------------|---|
| 1. Lanton Chumley | District Timber Program Manager |
| 2. Walter Cooper | District Recreation Program Manager (Retired) |
| 3. Jason Engle | Wildlife Biologist |
| 4. Jamie Sowell | District Fire Management Officer |
| 5. Don Eddings | District Civil Engineering Technician |
| 6. Tiffany Jones | District Civil Engineering Technician |
| 7. Tom Zimmerman | District Recreation Program Manager |

Caddo/LBJ:

- | | |
|--------------------|----------------------------------|
| 1. Marc Pons | Other Resource Assistant |
| 2. Scott Fry | District Fire Management Officer |
| 3. Shane Beavers | Recreation Forestry Technician |
| 4. Austin Sewell | Rangeland Manager |
| 5. Amanda Bataineh | GIS Specialist |

Davy Crockett:

- | | |
|---------------------|--|
| 8. Brian Townsend | District Timber Program Manager |
| 9. Merlinda Schory | District Recreation Program Manager/Special Uses (Retired) |
| 10. Pearlie Greene | Recreation Forestry Technician Retired |
| 11. Bobi Stiles | District Fire Management Officer/Silviculturist |
| 12. Guy Howard | Forestry Technician |
| 13. Russell Duty | Biological Science Technician |
| 14. Michael Barnard | Forestry Technician |
| 15. Kryan Kelley | Archeologist |
| 16. Kerry Hogg | Forester |

Sam Houston

- | | |
|-----------------------|------------------------------------|
| 1. Jeff Yurchick | Civil Engineer |
| 2. John Guedry | GIS Specialist (Retired) |
| 3. Daniel Jauregui | Biologist/Other Resource Assistant |
| 4. Bob Allen | District Timber Program Manager |
| 5. Randy Prewitt | District Fire Management Officer |
| 6. Wally Kingsborough | District Archaeologist |

Overview of the *National Forests and Grasslands in Texas (NFGT)* Road System

The National Forests and Grasslands in Texas (NFGT) road system is currently approximately 2394 miles. These roads are Forest Service jurisdiction roads. This mileage includes roads that are maintained by the Forest Service and other entities such as county governments and private landowners through agreements or special use permits. The mileage maintained by those other entities will not be a part of the analysis. Total mileage included in the analysis is 2346 miles.

These roads provide access to approximately 675,800 acres of national forest, as well as to numerous interspersed private tracts and nearby local communities. The system supports both recreation and resource management. Road types range from double lane paved roads to single lane gravel or native surface roads. There are 817 (Motor Vehicle Use Map) miles of Forest Service roads open for public use. Of those 817 miles, 158 miles are managed for high clearance vehicles, and 659 miles accommodate passenger cars. The Forest Service maintains 59 miles of paved roads that access recreation areas. Over 35% of existing travel ways are closed for periods of time greater than one year.

Although not originally intended or currently maintained for, this system is used by a large number of neighbors, rural and urban, for residential access. The road system is a combination of roads constructed to access timber sales and subsequent silvicultural activities, roads constructed to access recreation areas, and a variety of other routes. Funding for the construction or reconstruction of all types was generally provided either by congressional appropriations, or authorized as a component of a timber sale. Maintenance funding is primarily by congressional appropriations, although timber sales generally funds any maintenance required during the life of a particular sale operation.

Key Issues, Benefits, Problems and Risks, and Management Opportunities Identified

- **Current appropriations and supplemental revenue sources are not sufficient to adequately maintain the 2,346 mile road system as currently configured.** Without changes, the existing road system requires an annual expenditure of approximately \$3.3 million. After consideration of fixed costs, only about \$700,000 on average is available annually in the CMRD line item of the road maintenance budget, resulting in a shortfall of about \$3.1 million, or, in other words, NFTX receives about 21% of the road maintenance funding needed annually.
- **There is substantial system mileage which primarily serves either as access to private holdings or as roads under jurisdiction of other government entities.** Within the proclamation boundary of the National Forests and Grasslands in Texas, approximately 1,661 miles are private roads or under the jurisdiction of another government entity. There are approximately 2,346 miles that are Forest Service jurisdiction roads. Of this, there are about 62 miles that are Forest Service jurisdiction but where the primary maintainer is another government entity or a private landowner. Those miles will not be a part of the analysis. As opportunities allow, jurisdiction and maintenance costs should be considered for transfer to the most appropriate entity in order to allow the limited maintenance funding to be applied most effectively to the system roads of the forest.
- **Certain roads, particularly those located relatively low in the watersheds, may be causing undue stress to water quality** and associated aquatic organisms,

especially if they cannot be regularly and properly maintained. This is particularly the case in watersheds that are classified as “impaired.” However, there are no impaired watersheds in Texas; therefore, no potential reduction of forest roads in this watershed classification. There appear to be opportunities to decrease the total system maintenance costs, while at the same time better protecting water quality by decommissioning those roads with the highest risk and least benefit located in watersheds classified as Functioning or Functioning At Risk. There are 1044 miles that have been identified by the TAP to be considered for decommissioning.

- **There are a number of roads that will most likely be needed at some time in the future, but which do not appear to be needed for actions currently being proposed.** Storage of these roads (closure for at least a year, with only custodial maintenance provided) should be strongly considered. The TAP analysis suggests that about 298.65 miles should be considered for conversion to storage and custodial maintenance only until needed.
- **In order to meet budgetary limitations some roads currently opened year round will need to be identified to be considered for seasonal closure (181 miles); and some roads currently maintained for passenger car use will need to be identified to be considered for conversion to high clearance use only (22.50 miles).**
- **Relatively high road densities may be impacting some sensitive wildlife species in a few specific areas of the forest.** Overall, however, road densities do not exceed those allowed by the forest plan. As configured, the overall road density, exclusive of non-FS jurisdiction roads, is 2.25 miles/square mile, and the open road density is 0.61 miles per square mile.
- **Several roads or portions of roads may have to be closed due to insufficient bridge replacement funding.** There are 27 bridges on the forest that are existing and active located on open roads, of which three appear to be load restricted or otherwise deficient. Those bridges are Little Creek Bridge (Rd. 217, Milepost 2.0), South Cochino Bayou Bridge (Rd. 513, Milepost 0.30) and Conner Creek Bridge (Rd. 511, Milepost 7.50).
- **Opportunities should be sought to increase road maintenance revenues** where possible through agreements with the primary users or benefiting functions of the road system, such as the use of stewardship contracts and partnerships, including volunteer groups, such as hunters, equestrian organizations, all-terrain vehicle (ATV) user groups and others.

Comparison of Existing System to Minimum Road System as Proposed by the TAP

Refer to Appendix F for a summary of proposed changes to the existing road system suggested by the TAP. This information will be available to frame future NEPA analysis and decisions, along with additional site information collected during individual project analysis.

Next Steps

- TAP recommendations will be used to inform NEPA decisions, many of which will eventually be implemented in conjunction with various restoration projects on the forest.
- Prior to implementing these recommendations, NEPA determinations will be conducted at the appropriate scale, using the TAP to inform issues, particularly cumulative effects and affordability.
- The road system should be revisited with an updated forest-wide TAP, probably on about a 10-year cycle, with the next one due on or about the year 2025.

B. Context

Alignment with National and Regional Objectives

Sub-Part “A” Travel Analysis is required by the 2005 Travel Management Rule (36 CFR 212.5). Forest Service Manual 7712 and Forest Service Handbook 7709.55-Chapter 20 provide specific direction, including the requirement to use a six step interdisciplinary, science-based process to ensure that future decisions are based on an adequate consideration of environmental, social and economic impacts of roads. A letter from the Chief of the Forest Service dated March 29, 2012 was issued to replace a November 10, 2010 letter previously issued on the same topic. It reaffirms agency commitment to completing travel analysis reports for Subpart A of the Travel Management Rule by 2015, and also provides additional national direction related to this work, addressing process, timing and leadership expectations. The letter requires documentation of the analysis by a Travel Analysis Report, which includes a map displaying the existing road system and possible unneeded roads. It is intended **to inform future proposed actions** related to identifying the Minimum Road System. The TAP process is designed to work in conjunction with other frameworks and processes, the results of which collectively inform and frame future decisions executed under NEPA. This letter, including a diagram which further illustrates the relationship between NEPA and TAP, is included in Appendix H.

The document entitled “Sub-Part “A” Travel Analysis (TAP), Southern Region Expectations, Revised to align with 2012 Chief’s Letter” and attached in Appendix I, supplements the national direction for Forest Scale TAPs developed for the Southern Region.

Coordination with Forest Plan

The Revised Land and Resource Management Plan was adopted in 1996. It provides specific direction for overall management of the National Forests and Grasslands in Texas. The forest-wide TAP tiers to the forest plan by informing future NEPA actions that implement the forest plan and have transportation components. The TAP has been informed by the Watershed

Condition Framework, and likewise, the TAP is intended to inform future forest restoration activities, including watershed restoration.

Forest Communication Plan

In Fiscal Year 2016, the National Forests and Grasslands in Texas will begin the process of revising their Land and Resource Management Plan. The revision will require scoping and communication with outside special interest groups along as well as the public. The Forest Transportation Plan will be included as a part of that plan.

Budget and Political Realities

The roads located on the National Forests and Grasslands in Texas are a combination of historic trails that have undergone improvement over the years, roads that were built in the decades of the sixties, seventies and eighties to access timber sales, roads constructed for access to communities, either internal or adjacent to the forest, roads constructed by recreational users, and roads constructed or otherwise acquired through a variety of means to comprise the current system. As is the case for much of the rest of the infrastructure on the Forest, funding has been inadequate to properly maintain all of the forest's roads and bridges. In some cases, these roads and bridges have become superfluous to our administrative needs, and many no longer meet public needs either. Changes are inevitable, being driven both by the budget as well as by the need to have the most efficient and effective transportation system on the ground as possible, and no more. The TAP process is an attempt to begin to identify a proposed "Minimum Road System" (MRS) which will only come into place as NEPA decisions are made and then actual on-the-ground decisions are implemented. The MRS will probably change over time as well, as public needs and financial resources change. Therefore, it is expected that new forest-wide TAP analyses will continue to be needed, probably on about a 10-year cycle.

Anticipated 2012 Transportation Bill Effects

The Moving Ahead for Progress in the 21st Century Act, MAP-21 (P.L. 112-141), was signed into law by President Obama on July 6, 2012, and authorizes the Federal Lands Transportation Program (FLTP) for two years (2013-2014). Extensions of this bill are expected until a new reauthorization is enacted. The FLTP provides dedicated funding to improve access within federal lands. Of the \$300 million allocated for this program, the USDA Forest Service competes with the Bureau of Land Management (BLM) and the U.S. Army Corps of Engineers for up to \$30 million per year. The central theme of the program is performance management. As amended by MAP-21, 23 U.S.C 203(c), it requires that the USDA Forest Service, along with the other four core partners eligible for FLTP funding, define the part of its transportation system to be included in the FLTP. In addition, a baseline condition for this system should be reported annually to the Federal Highway Administration (FHWA). The National Forests and Grasslands

in Texas has designated approximately 761 miles of National Forest System Roads (NFSR) as eligible for FLTP.

The projects to be funded by the FLTP are selected at the Southern Region office. The amount of funding that each forest unit receives varies from year to year, depending on the priorities for the region. The NFGT has received \$70,000 and \$466,426 in FLTP funding in FY14 and FY15, respectively, for just over 9 miles of NFSR and several associated recreation area parking lots.

Under MAP-21, the Forest Highway Program was repealed and in its place a new program, the Federal Lands Access Program (FLAP), was created. This program differs from the old Forest Highways Program in that funding is available to improve access to all federal lands and not only national forests. In addition, transportation projects are funded for infrastructure that is under the state, county, or other local government's jurisdiction. No road network needs to be designated, and as a result, no projects located on the NFSR are eligible for FLAP funding.

Alignment with Watershed Condition Framework (WCF)

Along with the other national forests across the country, National Forests and Grasslands in Texas recently conducted an analysis of its watersheds, categorized them as to their condition and prioritized them for future efforts at improvement. Three categories were identified: Class 1 – Functioning Properly, Class 2 – Functioning at Risk, and Class 3 – Impaired Function. These classifications were performed on watersheds at the 6th order hydrologic unit classification (HUC) according to standard procedures described in the “Watershed Condition Framework” technical guide, found at

http://www.fs.fed.us/publications/watershed/Watershed_Condition_Framework.pdf. It was determined that 23 watersheds on the NFGT are Class 1; 9 on the Sam Houston, 8 on the Davy Crockett, 5 on the Angelina/Sabine and 1 on the Caddo-LBJ Grasslands. There are 74 watersheds designated as Class 2; 11 on the Sam Houston, 12 on the Davy Crockett, 46 on the Angelina/Sabine and 5 on the Caddo-LBJ Grasslands. *There are no Class 3 watersheds in Texas.* A map showing the location of these can be found in the Appendices. The Six Mile Creek Watershed and the Lucas Creek-Angelina River Watershed were selected as priority watersheds for focus work in the next decade. The priority watersheds may also be found on the map in Appendix B.

The forest-wide TAP analysis was heavily informed by the WCF. For example, roads located near streams within Functioning At Risk watersheds, and especially the two priority watersheds, were particularly considered as possible decommissioning candidates. Similarly, continuing watershed improvement work is intended to be informed in the future by the TAP.

C. Overview of National Forests and Grasslands in Texas and the supporting Transportation System

General Description of Land Ownership Patterns, Land Use and Historic Travel Routes

The Davy Crockett National Forest is comprised of 160,633 acres, occupying almost 41% of the proclamation boundary. Almost all is forested, with about 3,639 acres (or 2%) being wilderness or otherwise classified as roadless, and 156,994 acres (or 98%) being available for active forest management. Interspersed within the proclamation boundary, and adjacent to the national forest, are several large private tracts, some small farms and a variety of other ownership types. There are a few small communities within the proclamation boundary as well, the larger ones being Ratcliff and Kennard.

The Sam Houston National Forest is comprised of 163,030 acres, occupying almost 33% of the proclamation boundary. Almost all is forested, with about 3,855 acres (or 2%) being wilderness or otherwise classified as roadless, and 159,175 acres (or 97%) being available for active forest management. The largest communities within the proclamation boundary are New Waverly and Cold Spring.

The Angelina National Forest is comprised of 153,334 acres, occupying almost 38% of the proclamation boundary. Almost all is forested, with about 18,804 acres (or 12%) being wilderness or otherwise classified as roadless, and 134,530 acres (or 88%) being available for active forest management. There are a few small communities within the proclamation boundary as well, the larger being San Augustine and Zavalla.

The Sabine National Forest is comprised of 160,798 acres, occupying almost 36% of the proclamation boundary. Almost all is forested, with about 12,369 acres (or 8%) being wilderness or otherwise classified as roadless, and 148,429 acres (or 92%) being available for active forest management. There are a few small communities within the proclamation boundary as well, the largest one being Hemphill.

The Caddo/LBJ Grasslands is comprised of 38,186 acres occupying almost 21% of the proclamation boundary. It consists of the Caddo National Grasslands and the Lyndon B. Johnson National Grasslands. There are a number of small communities located near the Caddo Grasslands including Honey Grove and Monkston. The largest community near the LBJ Grasslands is Decatur, Texas, where the district office is located.

Table 1. Total Acres and Roadless Acres of NFGT by Ranger District

District	Total Acres	Roadless Acres
Davy Crockett	160,633	3,639
Sam Houston	160,030	3,855
Angelina	153,334	18,804
Sabine	160,798	12,369
Caddo/LBJ	38,186	0
Totals	672,981	38,667

There are 26 developed recreation sites managed by the Forest Service. Double Lake Recreation Area is managed by Recreation Resource Management (RRM). Townsend Recreation Area is managed by San Augustine County. There are six developed recreation sites managed by Sabine River Authority. Also, there are 425 miles of trails, supporting a variety of uses, including equestrian and pedestrian use. Motor vehicles are restricted to those roads shown on the official Motor Vehicle Use Map (MVUM) included in Section H, Appendix C.

Description of the Transportation System

Several federal and state highways, including Farm-to-Market (FM) Highways, which are under state jurisdiction, and quite a number of roads under county jurisdiction traverse various parts of the forest. Some of these roads comprise a portion of the 117 miles of Forest Highway, which provides access to relatively large tracts of the forest. Forest Highways (FH) are roads maintained under another agency's jurisdiction, which on occasion receive reconstruction project funding through the Highway Trust Fund.

There are 2,346 total miles of National Forest System Road (NFSR) under the jurisdiction of the National Forests and Grasslands in Texas. This mileage is comprised of 492 miles suitable for passenger car use, almost all of which are open to the public on a year round basis, and 1,853 miles only suitable for high clearance vehicular traffic. There are 895 miles on the system inventory that are closed for periods of time greater than one year, being in "storage" for future use when needed.

The Forest Service catalogs its roads in the official inventory, I-Web, by maintenance levels, loosely defined as follows:

- Maintenance Level 5 – Single or Double Lane Paved Roads w/ high degree of user comfort
- Maintenance Level 4 – Moderate User Comfort; primarily double lane aggregate roads with ditches
- Maintenance Level 3 – Lowest level maintained to accommodate passenger car traffic

- Maintenance Level 2 – Maintained primarily only to accommodate use by high clearance vehicles
- Maintenance Level 1 – Closed to all traffic for periods greater than one year.

Table 2 below shows the current break down of the NFGT road system by objective maintenance level:

Table 2. NFGT road system mileage by objective maintenance level.

District	ML 1	ML 2	ML 3	ML 4	ML 5	Total
Angelina/Sabine	213	645	131	26	18	1,033
Davy Crockett	369	160	132	44	4	709
Sam Houston	304	140	101	9	5	560
Caddo/LBJ	6	16	13	8	1	44
Total	892	961	377	87	28	2346

Private and Co-op Roads

Certain roads located on the forest are needed to provide access to private tracts of land, or by municipalities or large private landowners in cooperation with the forest. The maintenance responsibility for and jurisdiction of these roads are identified in the official inventory. Generally, costs for maintaining these roads are the responsibility of the appropriate benefitting entity, as further specified in the enabling agreements.

Unauthorized Roads

At any given time, there may be roads found to be in existence on the landscape that are not shown in the inventory or on an official map. These roads are considered to be unauthorized roads, unneeded for use by the NFGT. They are subject to decommissioning at any time funding becomes available for that purpose.

Road Maintenance Funding

The National Forests and Grasslands in Texas maintains its road system primarily with funding provided through the annual Interior and Related Agency's budget, specifically the CMRD line item. The NFGT received \$1,028,505 of this funding in fiscal year 2010. The forest's CMRD line item funding has decreased by 35.9 % from 2010 to 2015. In 2015, the forest received \$658,620. The line item consists of \$470,326 in fixed costs leaving \$189,462 for road maintenance and operation, and \$5,000 for road improvement.

Another source of revenue available for certain types of maintenance on the NFGT road system is Non-Agreement Co-operative work (CWF2). The NFGT received \$172,819 in CWF2 in FY 2010 for road maintenance. In 2015, that amount was reduced to \$45,794. Roads that support

forest management operations may be maintained with timber sale or stewardship dollars during the life of the operation, but that is not typically a long-term solution.

Stewardship funding related to good for services and retained during the past three years has been another source for revenue on the NFGT. The amount of funding for goods for services during the past three years is as follows:

District	FY12	FY-13	FY-14	FY-15	Total	Average
Angelina/Sabine	\$277,710	\$281,000	\$282,125	\$468,013	\$1,308,848	\$327,212
Davy Crockett			\$181,150	\$38,420	\$219,570	\$109,785
Sam Houston	\$23,923	\$150,329			\$174,252	\$87,126
Total	\$301,633	\$431,329	\$463,275	\$506,433	\$1,702,670	\$425,667

The Secure Rural Schools Act seeks to stabilize and transition payments to Counties with Federal lands in them. The purpose of this funding is to provide supplemental funding for roads and schools. Another purpose is to make investments in projects that improve the maintenance of existing infrastructure. Resource Advisory Committees are established to propose projects for Title II funding. Forest Service roads receive derive some funding from this act. During the past three years the amount of Title II funding received on National Forest System Roads are as follows:

Angelina Sabine FY-14 \$15,000.

Davy Crockett FY-13 \$25,000.

Average \$13,333.

Combining the total of the annual allocation of roads funding with stewardship goods for services, retained receipts, and secure rural schools Title II funding, the Forest receives on an annual basis \$1,170,414 dollars for maintaining the Forest's road system.

D. Cost of Operating and Maintaining the NFGT Roads and Bridges

Operations Costs

As indicated in the previous section, there is, on an annual basis, a total of approximately \$1,170,414 available with which to operate and maintain the National Forests and Grasslands in Texas road system. Of this, approximately \$470,326 or 40% is required in order to cover fixed costs, including management salaries, rent, fleet, travel and training and cost pool contributions. This amount also covers items such as data management, contract preparation and administration and upward reporting. Regardless of the size of the road system being managed this base amount is required. This leaves only about \$700,088 for actual maintenance of the road system, and it must cover replacement of deficient bridges and culverts as well.

Road Maintenance Components

The primary components of road maintenance on the National Forests and Grasslands in Texas include (in addition to inspections): 1) blading and ditching; 2) surfacing (repaving in the case of ML 5); 3) signs and markings; 4) drainage structures; and 5) mowing and brushing.

Bridge Maintenance and Reconstruction Costs

The National Forests and Grasslands in Texas has 27 bridges. These must be inspected every two years. The major culverts have to be inspected every other year. Until 2012, the Texas Department of Transportation inspected the forest's bridges as part of the Off-System Inspection System. There was no cost to NFGT for these inspections. The Regional Office has assumed inspections for our road bridges in order to become fully compliant with Federal Highway Bridge Program. At the present time, there are no structurally deficient or functionally deficient bridges on the NFGT. There are no bridges known or suspected to be load limited. Typical bridge replacement costs for NFGT are about \$ 6,900 per linear foot for a typical two-lane bridge. These costs need to be added to get a true picture of the total road and bridge maintenance costs for the next 10 years on the NFGT.

Total Cost of Operating and Maintaining the NFGT Roads and Bridges to Standard

Combining the information from the previous sections results in the following table which shows the total annual cost to maintain the national forest roads and bridges to standard as the system currently exists.

Table 4. Typical Unit Costs for Road Maintenance on NFGT by Maintenance Level

Item	Number Miles by Objective Maintenance Level	Unit Cost	Total Cost
Maintenance of Level 1 Roads	892	\$33	\$ 29,809
Maintenance of Level 2 Roads	961	\$85	\$ 81,405
Maintenance of Level 3 Roads	377	\$5,702	\$2,149,829
Maintenance of Level 4 Roads Agg.	88	\$4,153	\$ 366,947
Maintenance of Level 5 Roads	28	\$5,093	\$ 144,347
Inspection of ½ of Bridges each Year	13	\$19,190	\$19,190
Average Annual Replacement Cost of Bridges for next 10 years	3	\$110,000	\$110,000
Total Annual Cost			\$ 2,901,527

Note: The table does not include fixed costs. The annual fixed operating cost for road maintenance is \$470,000, bringing the total annual cost to \$3,371,527. Compare current available budget of \$700,088 to the needed amount of \$3,371,527.

Note: Appendix F shows the cost of maintaining the “suggested” Minimum Road System.

E. Assessment of Issues, Benefits and Risks

Financial

The primary financial issues relate to the inability to adequately maintain the existing road system with current funding sources. As indicated previously, there is on an annual basis a total of only about \$1.1 million available with which to operate and maintain the system including fixed costs, whereas the needed funding for the system as currently configured is about \$3.3 million dollars. As a result, deferred maintenance continually accrues on the system, but more importantly, it is not possible to maintain Best Management Practices (BMPs) required to adequately protect water quality and associated aquatic life. Congressional appropriations and funding from timber receipts have decreased. Consequently, the number of roads and bridges required to be closed due to safety concerns is increasing. As a result, the system is failing to meet the needs of both the recreating and traveling public and to provide for adequate resource access for forest management activities, including prescribed fire and wildland fire suppression.

Environmental and Social

The primary issues in the environmental arena relate to 1) erosion of the roadbed, cut slopes, fill slopes and ditches, with the resulting sediment discharge affecting water quality and associated aquatic resources; 2) in some cases, road density effects on certain wildlife species; and 3) the roads serving as a conduit for invasive species. In the social arena, the effects are primarily the demand for adequate access, sometimes offset by the need for providing solitude. Access is needed by a wide variety of forest users, including hikers, hunters, fishermen and other recreationists, as well as for forest management activities, such as restoration projects and fire suppression. Also, roads require surveillance, as they can easily become sites for crime, illegal dumping and similar activities.

Safety and Function

The primary issues related to safety and function of the road system include: 1) maintenance of a clear and smooth travel way; 2) access in the proximity of the use; 3) functioning of the drainage features; 4) width and stability of the road bed; 5) proper signs and markings; and 6) structurally and functionally sufficient bridges.

Measurement and Rating

Benefits and risks of the overall system were tabulated and appear in Appendix D. Benefits are the potential uses and socioeconomic gains provided by roads and related access. Problems are conditions for certain environmental, social, and economic attributes that managers deem to be unacceptable. Risks are likely future losses in environmental, social, and economic attributes if the road system remains unchanged.

The standard list of questions in the Forest Service Handbook was used as a guide to further assist in identifying the benefits and risks. The degree of risk and benefit was rated subjectively as being high, medium or low for the system by appropriate specialists. Then, after considering the entire system, each road was also considered. Those with particular issues, benefits and/or risks different from those of the entire system were listed and further described below for further consideration. As related projects become identified at some time in the future, this list may be referenced to inform projects or propose changes in the Minimum Road System.

F. Recommendations and Proposed Mitigation Measures

Rationale Used to Arrive at Proposed Minimum Road System

The Chief's March 29, 2012 letter reaffirms that "the Agency expects to maintain an appropriately sized and environmentally sustainable road system that is responsive to ecological, economic, and social concerns. The national forest road system of the future must continue to provide needed access for recreation and resource management, as well as support watershed restoration and resource protection to sustain healthy ecosystems." Budget realities being what they are, roads which are not really needed cannot be supported in the future.

Rationale for Removal (R), Storage (S), or Conversion (C)	Miles
Primarily provide access to the public or to a local community. Transfer maintenance responsibility as appropriate. (R)	51
Flagged as unneeded, or appear to have little benefit, yet high risk to environmental or social values (R)	1044
Not currently needed or anticipated for management or public use in the next decade (S)	892
Primarily needed for administrative use, currently useable by passenger cars, to be converted to high-clearance (C)	23

Roads which are receiving the highest amount of use, especially by the motoring public, or which access major developed recreation areas, should probably not be downgraded in general.

Inclement weather has a particularly costly impact on native and gravel surfaced roads. Therefore, to the extent possible, roads should be identified for seasonal closure. The TAP recommends that a minimum of 181 miles that are currently opened year-round be identified and converted to seasonal closure.

Miles by Maintenance Level Proposed as Unneeded, by Watershed Condition Class

Table D2 in Appendix E lists roads proposed as "unneeded", sorted by the condition of the watershed in which they lie, and with an indication of which ones are located in priority watersheds. The total number of miles on the National Forests and Grasslands in Texas which have been suggested as "unneeded" by the TAP is 1043.44. The number of un-needed miles in "at risk" watersheds is 734.88. The number of un-needed miles in "functioning properly" watersheds is 308.55. There are no impaired watersheds on the NFGT. The number of un-needed miles in priority watersheds is 41.17.

Suggested Conversion of Existing Road System to Minimum Road System

Appendix G lists the existing road system miles by maintenance level and then proposes changes which respond to the rationale above to comprise the future minimum road system. Although some roads have been suggested to comprise these changes, there are others which have not yet been identified. During the next, decade the suggested changes in overall road system makeup should inform projects, and additional individual road change proposals will be identified with the goal of achieving the proposed minimum road system and associated financial sustainability as quickly as is practical.

Best Management Practices (BMPs) Applicable to the National Forests and Grasslands in Texas

When maintaining the forest roads located on the NFGT the following Best Management Practices should be adhered to as a minimum:

- National Best Management Practices for Water Quality Management on Forest System Lands;
- Applicable State Best Management Practices;
- Best Management Practices listed in the current Forest Plan; and
- Completed Watershed Action Plans.

APPENDICES

Appendix A – Map of the Existing Road System.

This is an oversized document, therefore only the link is provided:

<\\ds.fs.fed.us\EFS\FS\NFS\NFinTexas\Project\SO\2013TAP\Maps\MapProduct>

Appendix B – Map of Watersheds

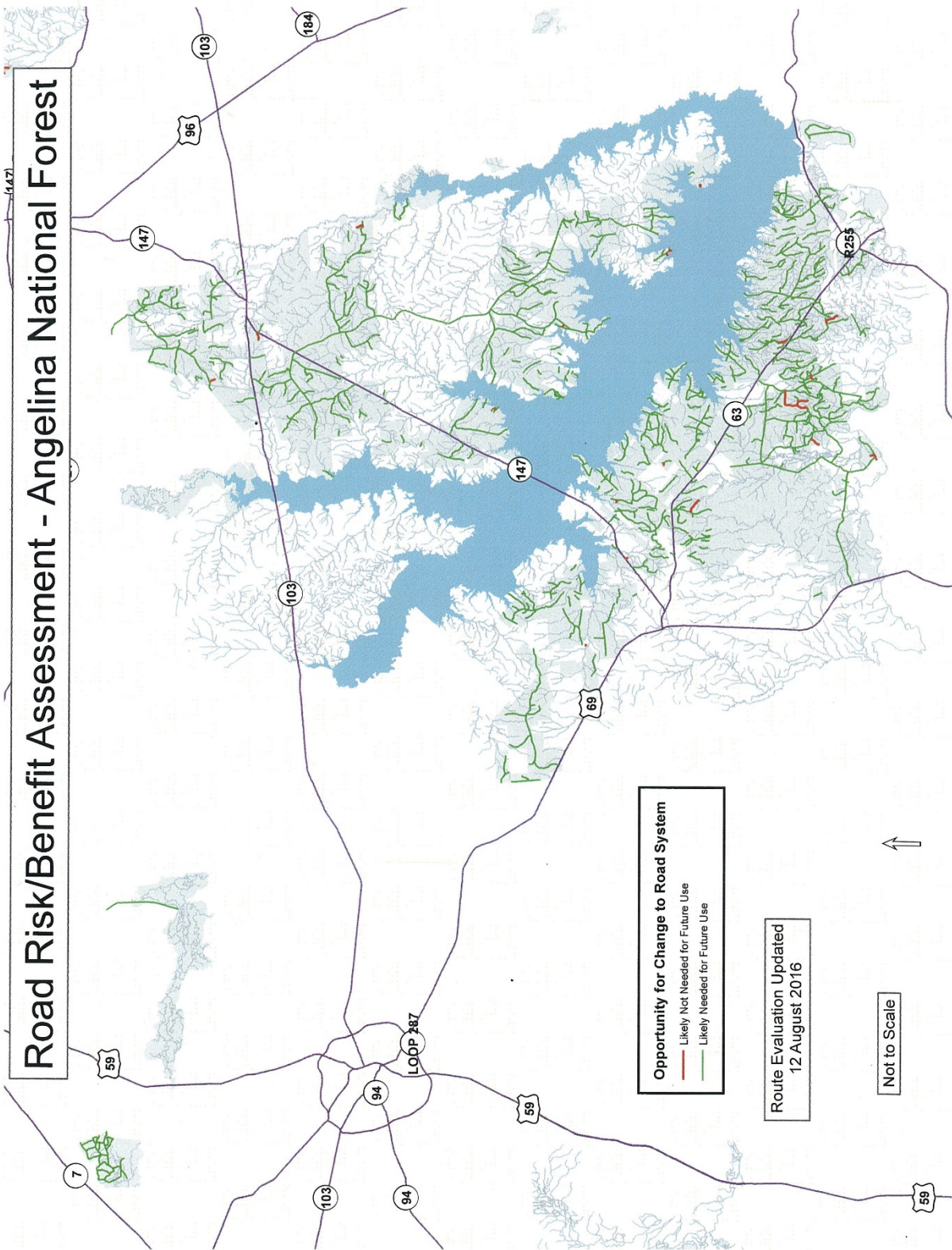
This is an oversized document, therefore only the link is provided:

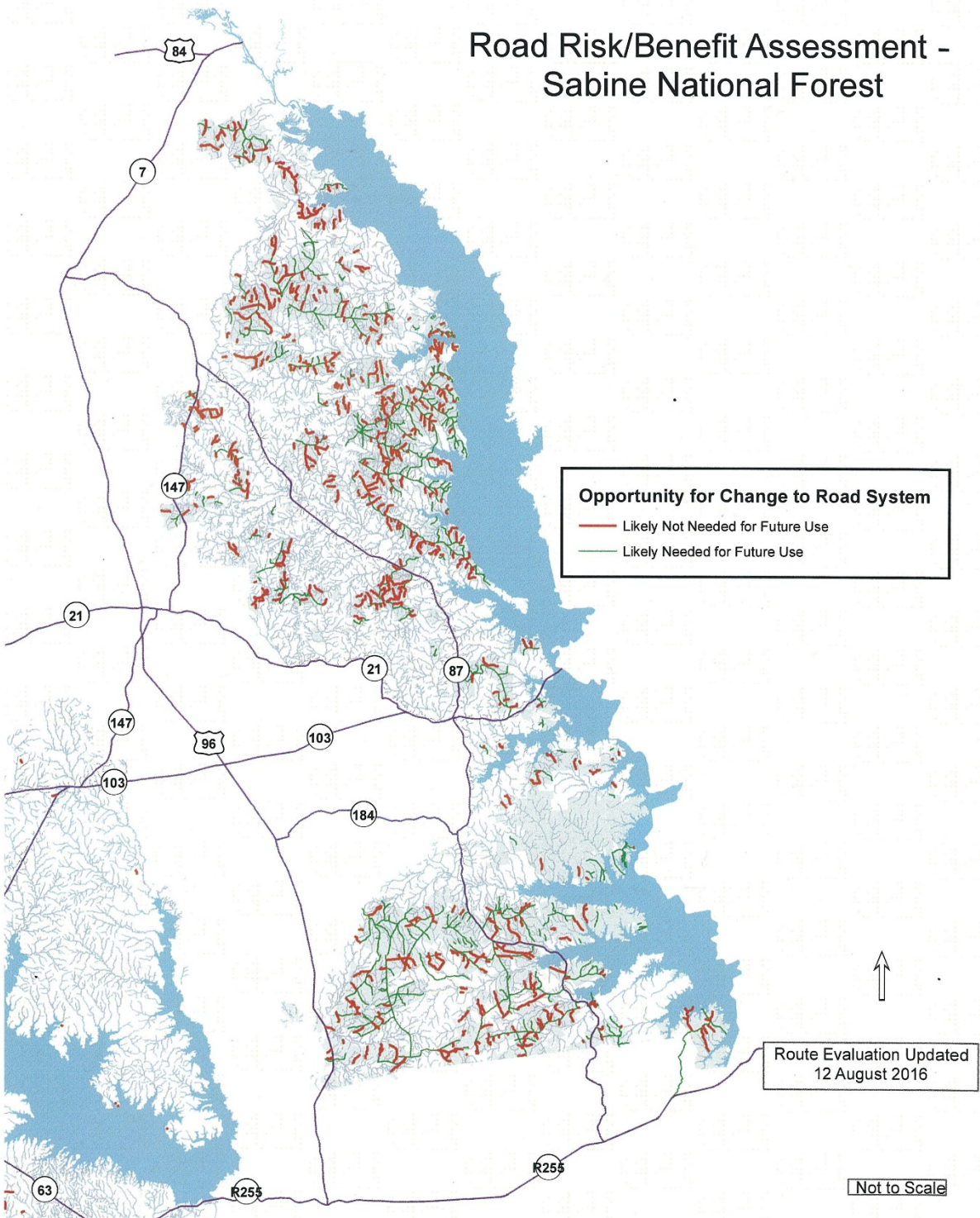
<\\ds.fs.fed.us\EFS\FS\NFS\NFinTexas\Project\SO\2015Engineers\SO\Opportunity ChangeRoad\Maps\MapProduct\Watershed Maps>

Appendix C – Maps of the Unneeded Roads.

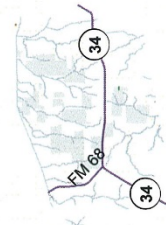
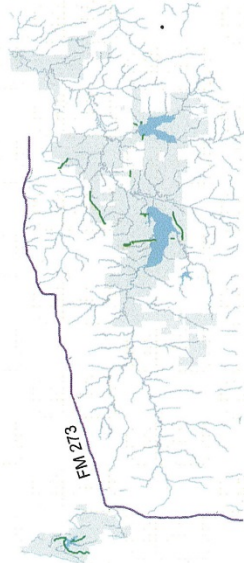
See link for additional map clarity

<T:\FS\NFS\NFinTexas\Project\SO\2015Engineers\SO\OpportunityChangeRoad\MapProducts>





Road Risk/Benefit Assessment - Caddo National Grassland

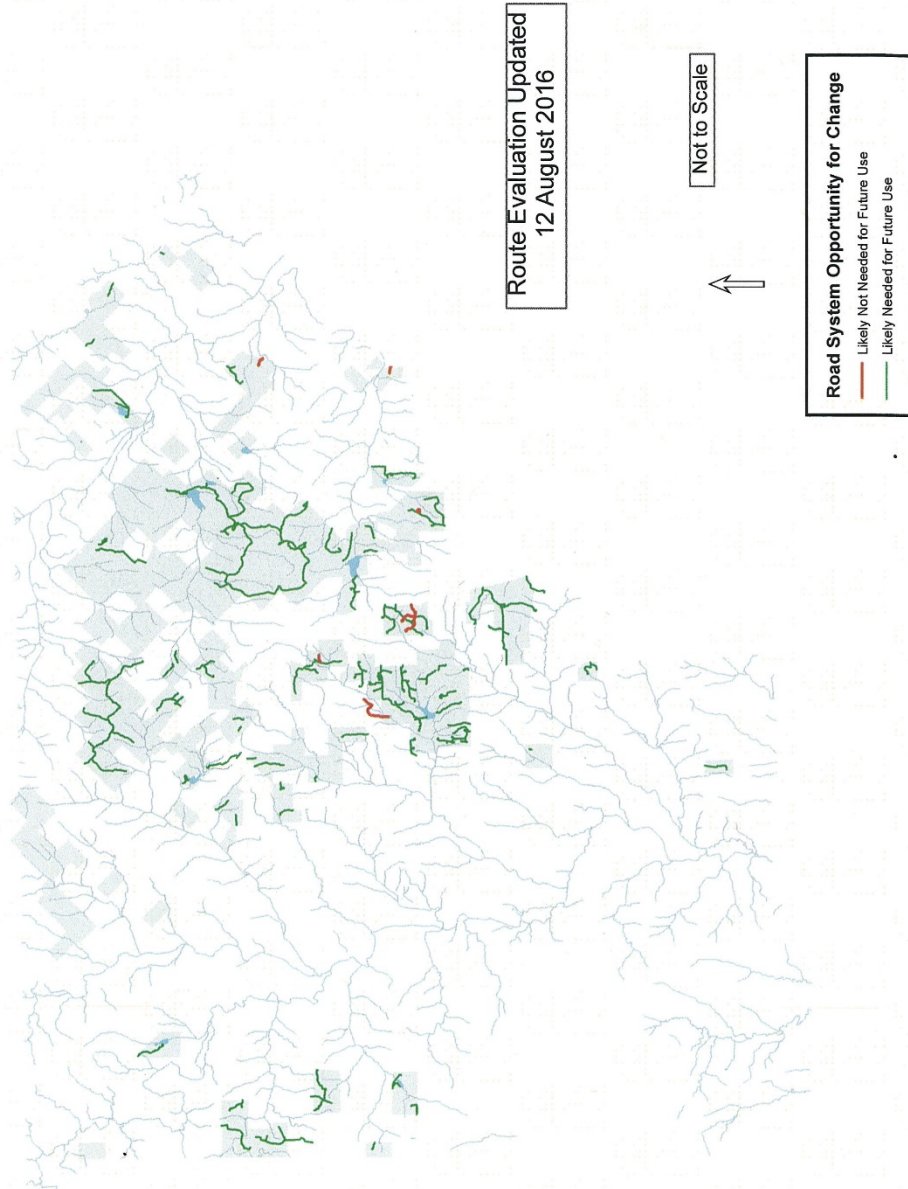


Opportunity for Change to Road System
Likely Not Needed for Future Use
Likely Needed for Future Use

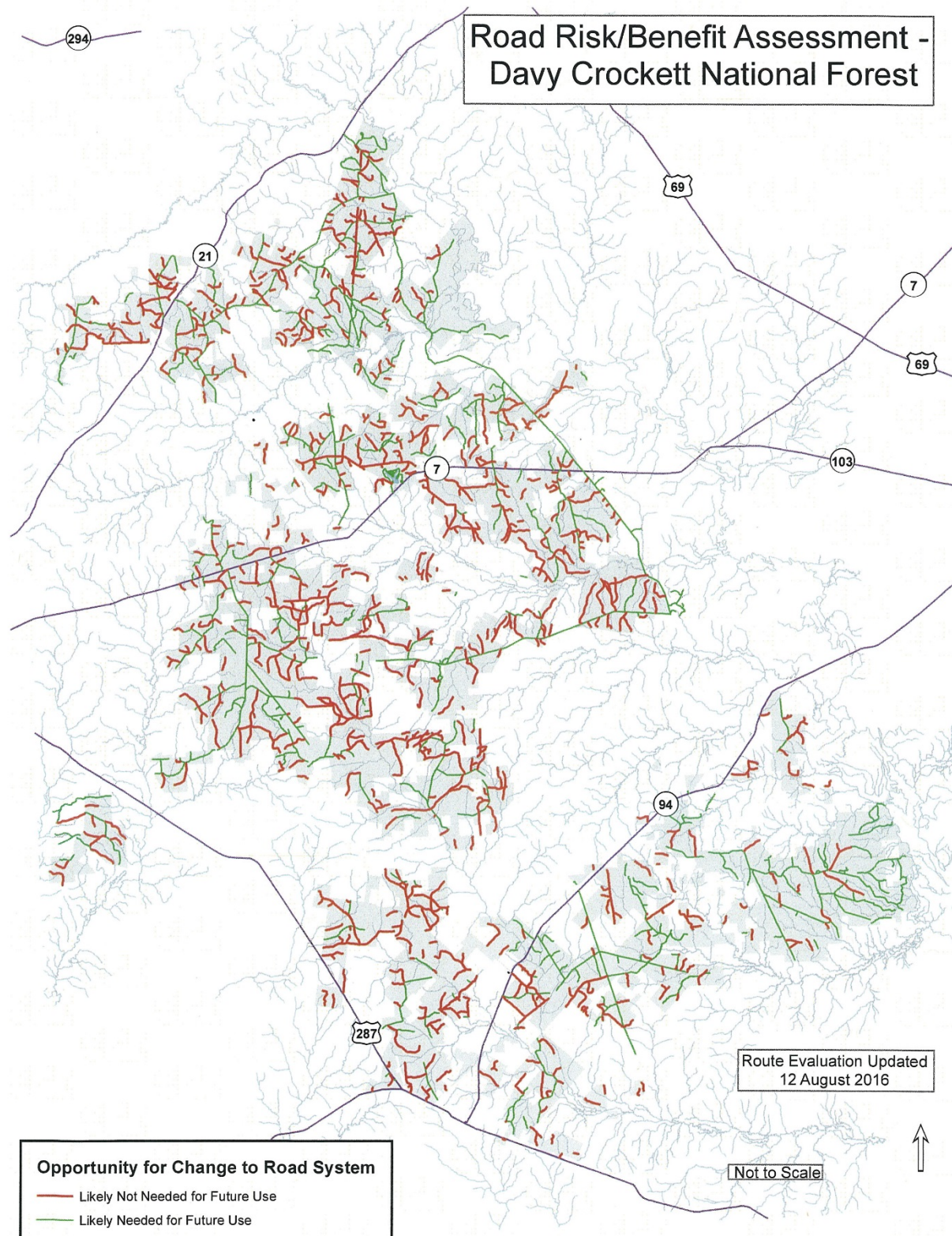
Route Evaluation Updated
12 August 2016

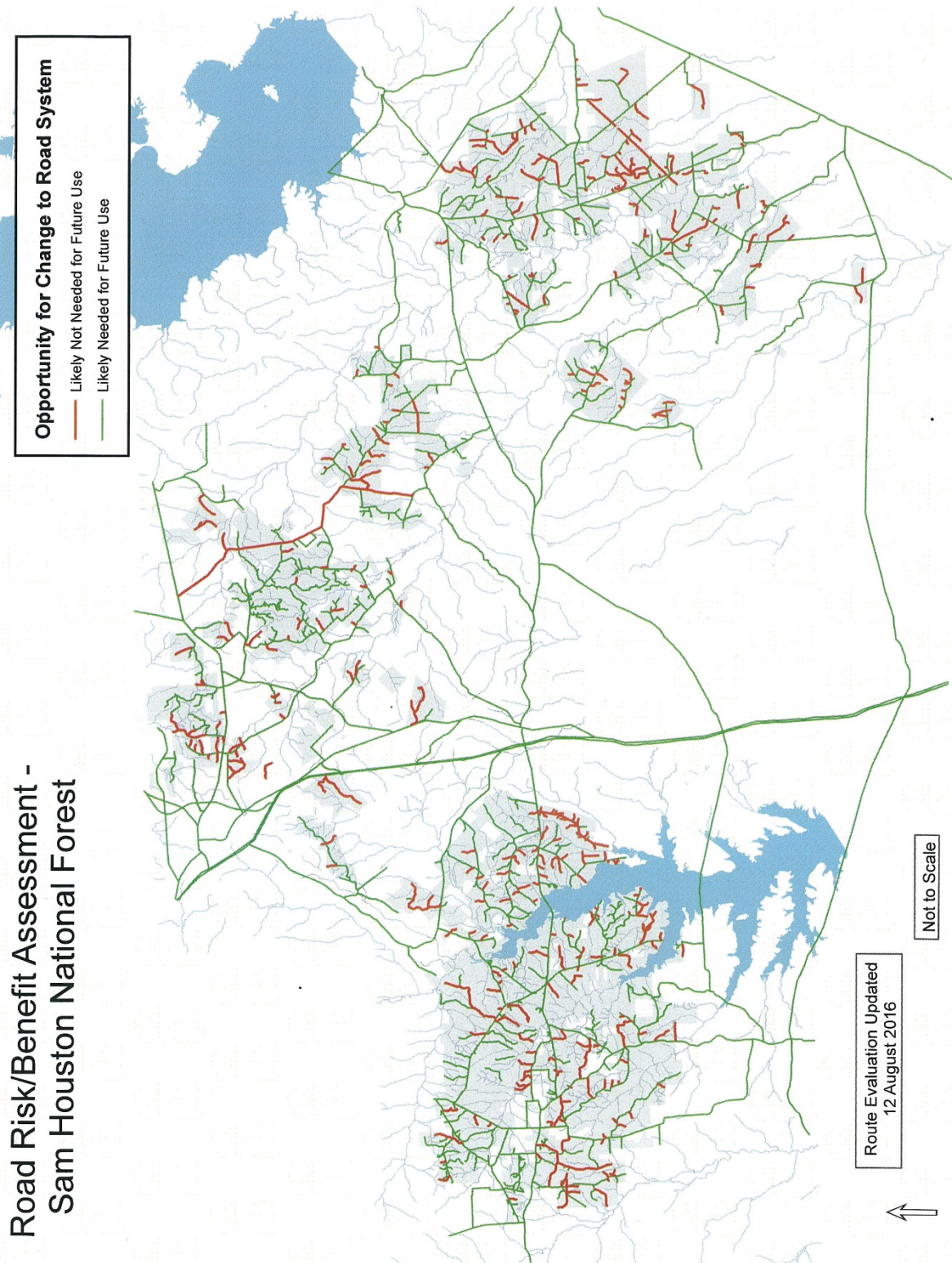
Not to Scale

Road Risk/Benefit Assessment - Lyndon B. Johnson National Grassland



Davy Crockett National Forest





Appendix D

Motor Vehicle Use Maps (MVUM's)

These are oversized documents, so only the link is provided.

Link to MVUM's

Angelina National Forest

http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3842635.pdf

Caddo National Grasslands

http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3842639.pdf

LBJ National Grasslands

http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3842640.pdf

Davy Crockett National Forest

http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3848112.pdf

Sabine National Forest

http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3806579.pdf

Sam Houston National Forest

http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3842638.pdf

Appendix E

Table D1 – Existing Road System Benefit to Risk Assessment

BENEFIT	RISK	ML1	ML2	ML3	ML4	ML5	Total Miles
H	L	6.02	0.85	0	0	0	6.87
H	M	2.02	2.6	0	0	0	4.62
H	H	0	13.92	13.99	0	3.1	31.01
M	L	43.48	20.8	3.54	0	0	67.82
M	M	77.13	121.43	70.59	2.59	0.66	272.4
M	H	32.21	103.06	169.31	37	1.1	342.68
L	L	303.19	413.43	23.65	16.08	1.06	757.41
L	M	366.77	251.47	54.06	7.88	9.6	689.78
L	H	61.45	33.05	41.93	24.69	12.82	173.94
		892.27	960.61	377.07	88.24	28.34	2346.53

Risk/Benefit Analyses are located at:

<T:\FS\NFS\NFinTexas\Project\SO\2015Engineers\SO\OpportunityChangeRoad\Maps\MapProduct\Risk Benefit Analysis>

Table D2 – Proposed Unneeded Roads by Watershed Condition

See the following link for a spreadsheet of possible unneeded roads by watershed condition.

<T:\FS\NFS\NFinTexas\Project\SO\2015Engineers\SO\OpportunityChangeRoad\Maps\MapProduct\Possible Unneeded Roads by WS Cond>

Appendix F – Spreadsheets of Existing Road System and Suggested MRS showing Maintenance Costs

Annual Cost of Maintaining the Existing Road System to Standard

Obj ML	Miles	Unit Cost	Total Rd. Mntce
1	892	\$33	\$ 29,809
2	961	\$85	\$ 81,405
3	377	\$5,702	\$ 2,149,829
4	88	\$4,153	\$ 366,497
5	28	\$5,093	\$ 144,347
TOTALS	2346		\$2,772,337

Obj ML	# of Bridge Replace (10 yr)	Average Cost	Total Cost	Avg Annual Cost
1	0			
2	0			
3	1	\$300,000	\$300,000	\$30,000
4	2	\$400,000	\$800,000	\$80,000
5	0			
TOTALS	3		\$110,000	\$110,000

Obj ML	Rd. Mntce	Br. Replace	Br. Inspection	Avg Annual Cost
1	\$29,809			\$29,809
2				\$81,405
3	\$ 2,149,829	\$30,000		\$2,179,829
4	\$366,497	\$80,000		\$446,497
5	\$144,347			\$144,347
TOTALS	\$2,772,337	\$110,000	\$19,190	\$2,901,527

Note: The table does not include fixed costs. The annual fixed operating cost for road maintenance is \$470,000, bringing the total annual cost to \$3,371,527.

Annual Cost of Maintaining the Suggested Minimum Road System

Obj ML	Miles	Unit Cost	Total Rd. Mntce
1	555	\$29	\$16,341
2	298	\$74	\$22,151
3	341	\$2,366	\$806,113
4	86	\$2,632	\$226,810
5	28	\$3,310	\$99,135
TOTALS	1308		\$1,164,550

Obj ML	# of Bridge Replace (10 yr)	Average Cost	Total Cost	Avg Annual Cost
1	0			
2	0			
3	1	\$300,000	\$300,000	\$30,000
4	2	\$400,000	\$800,000	\$80,000
5	0			
TOTALS	3		\$1,100,000	\$110,000

Obj ML	Rd. Mntce	Br. Replace	Br. Inspection	Avg Annual Cost
1	\$16,341			\$16,341
2	\$22,151			\$22,151
3	\$806,113	\$30,000		\$836,113
4	\$226,810	\$80,000		\$306,810
5	\$99,135			\$99,135
TOTALS	\$1,164,550	\$110,000	\$19,190	\$1,293,740

Appendix G – Comparison of Existing and Suggested Minimum Road System Miles by Maintenance Level

Objective Maintenance Level	Miles by Objective Maintenance Level, Existing Road System	Miles by Objective Maintenance Level, Suggested MRS	Comments
1	892	555	Reduction in the number of miles/ roads in storage
2	961	298	Significant reduction in Level 2 roads
3	377	341	Reduction in Level 3 roads
4	88	86	
5	28	28	
Totals	2,346	1308	

Appendix H – Chief’s Letter of Direction

File Code: 2300/2500/7700

Date: March 29, 2012

Route To:

Subject: Travel Management, Implementation of 36 CFR, Part 202, Subpart A (36 CFR 212.5(b))

To: Regional Foresters, Station Directors, Area Director, IITF Director, Deputy Chiefs and WO Directors

This letter is to reaffirm agency commitment to completing a travel analysis report for Subpart A of the travel management rule by 2015 and update and clarify Agency guidance. This letter replaces the November 10, 2010, letter on the same topic.

The Agency expects to maintain an appropriately sized and environmentally sustainable road system that is responsive to ecological, economic, and social concerns. The national forest road system of the future must continue to provide needed access for recreation and resource management, as well as support watershed restoration and resource protection to sustain healthy ecosystems.

Forest Service regulations at 36 CFR 212.5(b)(1) require the Forest Service to identify the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of National Forest System (NFS) lands. In determining the minimum road system, the responsible official must incorporate a science-based roads analysis at the appropriate scale. Forest Service regulations at 36 CFR 212.5(b)(2) require the Forest Service to identify NFS roads that are no longer needed to meet forest resource management objectives.

Process

Travel analysis requires a process that is dynamic, interdisciplinary, and integrated with all resource areas. With this letter, I am directing the use of the travel analysis process (TAP) described in Forest Service Manual 7712 and Forest Service Handbook (FSH) 7709.55, Chapter 20. The TAP is a science-based process that will inform future travel management decisions. Travel analysis serves as the basis for developing proposed actions, but does not result in decisions. Therefore, travel analysis does not trigger the National Environmental Policy Act (NEPA). The completion of the TAP is an important first step towards the development of the future minimum road system (MRS). All NFS roads, maintenance levels 1-5, must be included in the analysis.

For units that have previously conducted their travel or roads analysis process (RAP), the appropriate line officer should review the prior report to assess the adequacy and the relevance of their analysis as it complies with Subpart A. This analysis will help determine the appropriate scope and scale for any new analysis and can build on previous work. A RAP completed in accordance with publication FS-643, “Roads Analysis: Informing Decisions about Managing the National Forest Transportation System,” will also satisfy the roads analysis requirement of Subpart A.

Results from the TAP must be documented in a **travel analysis report**, which shall include:

- A map displaying the roads that can be used to inform the proposed action for identifying the MRS and unneeded roads.
- Information about the analysis as it relates to the criteria found in 36 CFR 212.5(b)(1).

Units should seek to integrate the steps contained in the Watershed Condition Framework (WCF) with the six TAP steps contained in FSH 7709.55, Chapter 20, to eliminate redundancy and ensure an iterative and adaptive approach for both processes. We expect the WCF process and the TAP will complement each other. The intent is for each process to inform the other so that they can be integrated and updated with new information or where conditions change. The travel analysis report described above must be completed by the end of FY 2015.

The next step in identification of the MRS is to use the travel analysis report to develop proposed actions to identify the MRS. These proposed actions generally should be developed at the scale of a 6th code subwatershed or larger. Proposed actions and alternatives are subject to environmental analysis under NEPA. Travel analysis should be used to inform the environmental analysis.

The administrative unit must analyze the proposed action and alternatives in terms of whether, per 36 CFR 212.5(b)(1), the resulting road system is needed to:

- Meet resource and other management objectives adopted in the relevant land and resource management plan;
- Meet applicable statutory and regulatory requirements;
- Reflect long-term funding expectations;
- Ensure that the identified system minimizes adverse environmental impacts associated with road construction, reconstruction, decommissioning, and maintenance.

The resulting decision identifies the MRS and unneeded roads for each subwatershed or larger scale. The NEPA analysis for each subwatershed must consider adjacent subwatersheds for connected actions and cumulative effects. The MRS for the administrative unit is complete when the MRS for each subwatershed has been identified, thus satisfying Subpart A. To the extent that the subwatershed NEPA analysis covers specific road decisions, no further NEPA

analysis will be needed. To the extent that further smaller-scale, project-specific decisions are needed, more NEPA analysis may be required.

A flowchart displaying the process for identification of the MRS is enclosed with this letter.

Timing

The travel analysis report **must be completed by the end of FY 2015**. Beyond FY 2015, no Capital Improvement and Maintenance (CMCM) funds may be expended on NFS roads (maintenance levels 1-5) that have not been included in a TAP or RAP.

Leadership

The Washington Office lead for Subpart A is Anne Zimmermann, Director of Watershed, Fish, Wildlife, Air and Rare Plants. Working with her on the Washington Office Steering Team are Jim Bedwell, Director of Recreation, Heritage, and Volunteer Resources, and Emilee Blount, Director of Engineering. I expect the Regions to continue with the similar leadership structures which have been established.

Your leadership and commitment to this component of the travel management rule is important. Together, we will move towards an ecologic, economic, and socially sustainable and responsible national road system of the future.

/s/ James M. Pena (for):

LESLIE A. C. WELDON

Deputy Chief, National Forest System

Appendix I – Sub-Part A Travel Analysis (TAP), Southern Region Expectations, Revised to Align with 2012 Chief’s Letter

A. Background. During the period 2005 - 2010 the National Forests of the Southern Region successfully completed Sub-Part “B” (Designation of Roads, Trails and Areas for Motor Vehicle Use) Travel Analysis. The result was a set of Motor Vehicle Use Maps (MVUMs) which prescribe the Forest Service roads that allow traffic; and in doing so it also prohibited cross-country travel by off-highway vehicles (OHVs). Forests are now beginning work on Sub-Part “A” (Administration of the Forest Transportation System) Travel Analysis to identify the minimum road system needed for safe and efficient travel and for the protection, management and use of NFS lands; and also to identify roads no longer needed to meet forest resource management objectives.

TAP analysis identifies risks and benefits of individual roads in the system, but especially cumulative effects and affordability of the entire system. Consideration is given to the access needed to support existing Forest Plans, and for informing future Forest Plans and resulting projects. TAP is intended to identify opportunities to assist managers in addressing the unique ecological, economic and social conditions on the national forests and grasslands.

B. Agency Direction. Sub-Part “A” Travel Analysis is required by the 2005 Travel Management Rule (36 CFR 212.5). Forest Service Manual 7712 and Forest Service Handbook 7709.55 Chapter 20 provides specific direction, including the requirement to use a six step interdisciplinary, science-based process to ensure that future decisions are based on an adequate consideration of environmental, social and economic impacts of roads. A letter from the Chief of the Forest Service dated March 29, 2012 was issued to replace a November 10, 2010 letter previously issued on the same topic. It reaffirms agency commitment to completing travel analysis reports for Subpart A of the travel management rule by 2015, and also provides additional national direction related to this work, addressing process, timing and leadership expectations. The letter requires documentation of the analysis by a travel analysis report, which includes a map displaying the existing road system and possible unneeded roads. It is intended to inform future proposed actions related to identifying the minimum road system. The TAP process is designed to work in conjunction with other frameworks and processes, the results of which collectively inform and frame future decisions executed under NEPA. These other analyses and procedures include Watershed Analysis Framework and mapping; Recreational Framework planning and analyses; and forest-wide planning under the new Planning Rule. This document (Southern Region Expectations) supplements the national direction for Sub-Part “A” TAPs developed for the Southern Region.

C. Geographic Scale. Like smaller scale road analyses (RAPS) that have been underway at the project level, TAPs consider economic, environmental and social effects of roads. Analysis at the smaller project scale, however, does not adequately address cumulative effects and affordability. The Chief’s letter requires that proposed NEPA actions be informed by work at the 6th order HUC watershed as a minimum. Southern Region Expectations are for a Unit TAP at the District level or equivalent; and since budgets are generally allocated to the Forest level, District analyses are not considered complete until all other Districts on the same Forest are also complete and have been integrated to create a Forest Scale TAP. As projects which involve travel (road) decisions are subsequently proposed on a unit,

additional project level analysis will be required in advance of associated NEPA decisions only if the proposal varies substantially from the Unit Scale TAP covered by it. The purpose would be to show any additional impact on cumulative effects and affordability.

D. Process, Review and Approval. Forests Interdisciplinary Teams (IDTs) are expected to conduct analyses, with guidance and review by the Regional Office TAP Review Team (members listed below). Standard boilerplate, spreadsheets and Executive Summary format will be developed by the Review team for incorporation into the TAP reports. Final review will be by the Forest Supervisor, indicating that the analyses comply with national and regional direction. Upon completion of the last District TAP on a Forest, the Forest Supervisor needs to submit a forest-wide Executive Summary and verify that the cumulative results meet the expectations defined in this guidance.

The Regional TAP Review Team consists of Team Leader Paul Morgan (Engineering), Emanuel Hudson (Biological and Physical Resources), Mary Hughes Frye (Recreation), Paul Arndt (Planning) and various other ad hoc members as needed. They will submit their review comments to the TAP Steering Team prior to officially conveying them to the Forest. The Steering Team will be responsible for overall direction and oversight of the process. This team consists of Randy Warbington, TAP Steering Team Lead and Director of Engineering, Dave Schmid, Director of Biological and Physical Resources, Chris Liggett, Director of Planning, and Ann Christensen, Director of Recreation as well as George Bain, Forest Supervisor on the Chattahoochee Oconee NF's and Steve Bekkerus, Regional Legislative Affairs Specialist.

E. Information Systems. Analysis will be based upon field-verified spatial data (GIS, or Geographic Information System road and trail layers), and official tabular data (from I-Web, the corporate Forest Service data base) as applicable. ARC Map products will be included as a part of all completed Unit Scale TAPs, and will be provided to the Regional Office TAP review team as a part of the final TAP report.

F. Access. As prescribed by 16USC532 the Forest Roads and Trails Act TAPs should identify an adequate system of roads and trails to provide for intensive use, protection, development, and management of National Forest System lands. As such, they should address user safety and environmental impacts, and provide for an optimum balance of access needs and cost. Roads, trails and bridges that are unsafe and where unacceptable risks cannot be eliminated or mitigated due to a lack of funding should be identified for closure or possible decommissioning. Unneeded, temporary and unauthorized routes should be identified for possible decommissioning. TAPs should support current Forest Plan direction and anticipate future Forest Plan analysis needs, as well as Recreational Framework planning and analyses. As unit scale TAPs are completed, associated MVUMs must be reviewed. After appropriate NEPA decisions are made to implement TAP recommendations, future MVUM revisions need to be revised to assure that they are in agreement with those decisions.

G. Environmental. One major analysis component of the TAPs is impact of the road system on water quality. In those cases where high road densities on National Forest lands are a major factor in causing watersheds to be at risk or impaired, some roads should be identified for decommissioning in order to reduce the impacts and change the classification. Also, it should be recognized that some

existing roads are poorly located and should be eliminated, while some new roads might be needed to replace them and provide essentially equivalent access in better locations, generally farther away from live streams or wetlands. The Watershed Condition Framework should inform each unit's travel analysis. An overriding objective for all roads should be compliance with provisions cited in National Best Management Practices for Water Quality Management on National Forest System Lands, April 2012.

While a reduction in maintenance levels may be a desired option for cost reduction, it is not an appropriate strategy when it results in more environmental impacts. Similarly, changes in recreational use should be considered, especially for roads that cannot be maintained to standard and which may begin to attract challenge-oriented four-wheelers that create even further impacts on the environment and on the road.

H. Financial. Units should consider all expected sources of funding available to maintain the road system to appropriate standards (based upon 3 year history and current trends), and include all costs that are required to comply with applicable Best Management Practices (BMPs) for their maintenance. Include associated bridge maintenance as well, and replacement costs for those routes which include bridges that are deficient or expected to need major work in the next ten year period. Identify and account for fixed costs (program management, fleet, etc.) when analyzing financial feasibility. Ultimately units must balance the costs of maintaining the identified system such that the recommendation will not result in accrual of deferred maintenance on roads and bridges once the TAP is implemented (i.e. there should be a zero balance between anticipated maintenance revenue and anticipated maintenance cost on an annual basis).

The focus of this analysis should not be primarily on disinvestment, i.e. just reducing passenger car roads to high clearance roads in order to meet funding constraints. Roads receiving minimal maintenance have the high likelihood, at least those roads located relatively low in the watershed, of creating additional siltation impacts. They can also have unintended consequences for recreation management. Therefore a better strategy might be to identify roads not required for current operations but which might be needed at some time in the future for seasonal or intermittent closure, or "storage". Other strategies might include scheduling maintenance over a two to three year cycle on less used roads, adding seasonal restrictions, identifying roads to transfer to state or local jurisdiction, and identifying unneeded roads for possible decommissioning. Total mileage of high clearance roads should not generally increase over the amount in the current system unless it is determined that there has been substantial maintenance level "creep" over the years and therefore a substantial increase in high clearance roads is warranted. However it is expected that the number of roads identified to be placed in storage will generally increase from the current level.

Finally it should be noted that similar to the road system, the trail system is also over-committed to be managed within its maintenance budget. Therefore, unless maintenance funding is verified to be available over the long-term, it is not acceptable to identify roads for conversion to trails; the more appropriate options would be storage or decommissioning, depending upon future need.

I. Public Involvement and NEPA (National Environmental Protection Act) Requirements. Unit scale TAPs are not NEPA decisions; they are analyses intended to inform future projects regarding affordability and cumulative effects. These projects, depending upon the specific impacts, will generally require NEPA decisions prior to implementation. The public will need to be provided opportunities for comment on TAP recommendations near to the time that that actual projects are being proposed. This would be expected to include a broad spectrum of participation by citizens, other agencies, and tribal governments as appropriate.

J. Products. All final products to be posted on an internal website or on the “O” drive available for access by other Forests and the Regional Office. The final product should consist of the following items:

- 1) A Travel Analysis Report summarizing the process the results of all analyses conducted.
- 2) A map showing the entire Road System, ML 1-5, and delineating potential unneeded roads.
- 3) A list of roads that are proposed for transfer to another jurisdiction and whether acceptance by that jurisdiction is likely within the next three years.
- 4) A tabular summary of issues, benefits and risks for each road in the system. (Although not included in this write-up an example format is available and will be provided to each unit as they begin work on their TAP.)
- 5) A spreadsheet identifying available maintenance funding and expected costs for applying affordable operational maintenance levels and associated BMPs (best management practices) to the road system to result in a financial strategy that balances funding and costs such that no deferred maintenance will accrue if fully implemented.
- 6) Signature sheets with dates, indicating preparation and review officials, and Review by the Forest Supervisor.