1. Trails

There are about 2,260 miles of trails on the Forest in the national infrastructure database which is the official database for the Forest Service. A spatial analysis was conducted to determine how many trails are within each geographic area. This analysis determined that there are 2,095 miles of trails. This difference of 165 miles is likely due to the database not being sufficiently geo-referenced and aligned in the database.

There are 1,091 miles outside of wilderness and 1,169 miles within designated wilderness. In the last 5 years, the Forest maintained about 1,000 miles of trails per year, and improved/reconstructed an average of 30 miles of trails. Trail maintenance and reconstruction are highly dependent on budgets and partnerships with outside groups. Trails can have multiple types of use on them and the following table displays the different types of allowable uses by geographic area.

Allowed Use	Hungry Horse	Middle Fork	North Fork	Salish Mtn	South Fork	Swan Valley	Outside Area*
Bicycles	122	51	184	144	86	140	5
Hiking	157	397	184	150	856	217	13
Pack & Saddle	125	397	184	144	856	208	13
Summer Motorized	50	8	10	103	0	48	2

Table 1. Allowed Summer Trail Use in miles by Geographical Area on the Flathead NF

^{*} Trail may go off forest or through private land easement

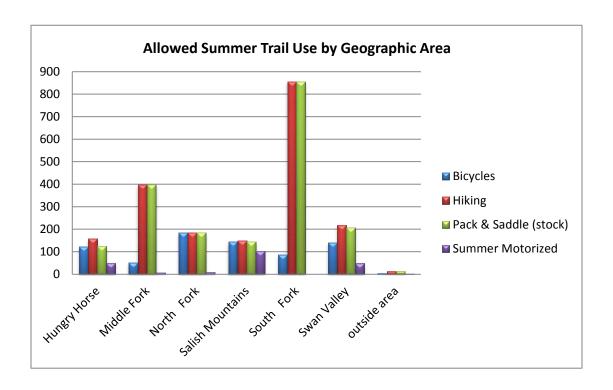


Figure 1. Allowed Trail Use in miles by Geographical Area on the Flathead NF

900 800 700 600 ■ Motorized Trails 500 ■ Non-Motorized Trails 400 300 10 48 200 50 100 103 0 Hungry Middle North Salish South Swan outside Horse Fork Fork Mountains Fork Valley area

Summer Motorized and Non-motorized Trails in Miles

Figure 2. Miles of summer motorized and non-motorized trail on the Flathead NF

Please note that non-motorized trails do not necessarily allow all types of non-motorized traffic, and may have various restrictions by type and season of non-motorized traffic. Motorized trails do not necessarily allow all types of motorized traffic, and may have various restrictions by type and season of motorized traffic.



Figure 3. Miles in trail class on the Flathead NF

Over-snow Motorized Use

Over-snow motorized vehicle recreation is generally allowed from December 1 to March 31. As shown in the maps, extended spring use is allowed in the following four areas:

- Groomed routes in Canyon Creek until April 14;
- 3,100 acres at Sixmile until April 30;
- 17,500 acres in Challenge/Skyland area until May 14, and
- 31,800 acres in Lost Johnny area until May 31.

Roads open year round to motorized use may accommodate over-snow vehicles as conditions allow, unless passable to conventional vehicles. Exceptions are:

- Trail Creek Road past Tuchuck Campground, and
- Whale Creek Road 318 west of the junction with Road 10832.

Over-snow vehicles would be prohibited on those two sections of road otherwise open year round.

For safety reasons the following road on the Tally Lake Ranger District is closed to snowmobile traffic year-round unless otherwise permitted or for performance of an official duty such as an organized rescue:

• Road 9790 (Taylor Creek) at the junction with the groomed Taylor Creek snowmobile trail to the permit boundary of Big Mountain.

This decision also includes additional restriction of motorized over-snow vehicles within and adjacent to the Big Mountain Ski Resort Area to improve protection of facilities and public safety. These measures are displayed on the decision map for Tally Lake ranger District.

http://www.fs.usda.gov/main/flathead/maps-pubs scroll to Flathead National Forest District Over -snow Vehicle Use Maps, click on the map you want to download.

Table 2. Acres of Areas where Over-snow Use is Allowed and Not Allowed on the FNF

	Hungry	Middle	North	Salish	South	Swan	Outside	Total
	Horse	Fork	Fork	Mnt	Fork	Valley	area	
Over snow use not allowed	146,100	354,300	342,600	596,200	758,200	361,500		2,558,900
Over-snow use allowed	185,700	20,600	47,100	240,500	32,500	170.300	294	697,000

Infra data 2/5/2014

Trail Maintenance and Budget

Trail maintenance schedules are based on trail class shown in figure 3. Fifty-three percent of the forest trails are in trail class 3 which means these trails are typically scheduled for maintenance every 3 to 5 years. Trail maintenance is accomplished by Forest Service employees, volunteers and partners such as outfitters and guide. Trail class also indicates the potential appropriateness of each of the trail classes for the managed uses of trails. For example, trail class 1 includes the least developed and most challenging NFS trails. Trails in this category are typically very rugged and steep, with little or no defined tread or

clearing and many or continuous obstacles. Hiker/pedestrian and bicycle are potential appropriate for trail class 1 and not appropriate for pack and saddle (but they may be allowed). Click here for the complete matrix of the potential appropriateness of each of the trail classes for the managed uses.

Table 3. Trails Maintained on the Flathead National Forest 2009 to 2013

Year	Trails	Miles of trail	% of Trails
	Maintained	Improved*	Maintained
2013	865	23	39%
2012	1,611	43	73%
2011	1,281	39	59%
2010	700	28	33%
2009	566	19	27%

^{*} Heavy maintenance or reconstruction of the trail

Table 4. Annual Trail Budget for FNF 2009 to 2013

Fiscal	Annual Trail
Year	Budget
2013	\$548,600
2012	\$737,800
2011	\$774,000
2010	\$684,000
2009	\$710,500

Conflicts with other trail users

The majority of the trails on the forest, outside of designated and recommended wilderness and specially designated areas such as Jewel Basin Hiking Area, allow for multiple uses such as stock, bicycle and/or hikers. The forest is beginning to see conflicts on trails where some mountain bike users would like challenge features (such as jumps) available on trails that are also open to hikers and/or stock.

Trends in trail access

Our current trail system is trending towards not sustainable with current and projected budgets. Maintenance has decreased as budgets decrease with some trails being maintained less frequently or at a lesser standard such as logging out a trail early in the season. This has increased deferred maintenance on system trails which may lead to degradation of the trail, increase erosion/sedimentation and increased negative experiences for users.

2. Roads

Roads are an important aspect to recreational use – they provide a method to access recreational facilities such as trails, camping opportunities as well as provide recreational experience such as driving for pleasure, viewing scenery, OHV riding. The forest has 1,424 miles (41%) of open roads (i.e. allow highway legal vehicles) to provide and access recreational opportunities. Conversely, the forest has about 2,068 miles (59%) of roads that are closed to motorized use. These generally provide non-motorized experience but some closed roads may allow for motorized trail use.

Forest-wide, 59% (2,068 miles) of the roads are in custodial care (closed to motorized use); open to motorized use are 41% (1,424 miles miles) with 14% are open for high clearance vehicles and 27% are open for passenger car.

Table 5. Miles of roads open to the public by maintenance level and geographic area on the Flathead NF

Operational Maintenance Level	Hungry Horse	Middle Fork	North Fork	Salish Mountains	South Fork	Swan Valley	Total Miles
Basic Custodial Care (closed)	0	0	0	2	0	0	2
High Clearance Vehicles	55	17	93	264	12	30	471
Passenger Car	170	21	144	345	46	225	951
TOTAL MILES	225	38	237	611	58	255	1,424

Compiled from INFRA 12/2/13

Table 6. Miles of roads closed to the public by maintenance level and geographic area on the Flathead NF

Operational Maintenance Level	Hungry Horse	Middle Fork	North Fork	Salish Mnt	South Fork	Swan Valley	Outside Area*	Total Miles
Basic Custodial Care (closed)	316	39	260	607	74	768	1	2,065
High Clearance Vehicles	12	0	6	6	0	4		29
Passenger Car	1		0		0	0		2
TOTAL MILES	329	39	266	613	74	772	1	2,094

^{*} Roads may go off forest or through private land easement

ML 3-5 roads are collectively maintained for travel by a prudent driver in a standard passenger car. These roads fall under the requirements of the National Highway Safety Act and the Manual of Uniform Traffic Control Devices. Warning signs and traffic control devices are provided to alert motorists of situations that may violate expectations.

Tables 7. Percentage of total roads by maintenance categories on the Flathead National Forest

Geographic Area	Basic custodial	High Clearance	Passenger Car
	care	vehicles	
Hungry Horse	57%	12%	31%
Middle Fork	51%	22%	27%
North Fork	52%	20%	29%
South Fork	56%	9%	35%
Salish Mountain	50%	22%	28%
Swan Valley	75%	3%	21%

Compiled from INFRA 12/2/13

The total number of National Forest System Roads (NFSR) on the Flathead has steadily been decreasing since 1995. A total of about 887 miles of road have been decommissioned during this time. Most of this decommissioning has taken place in grizzly bear recovery areas. However, there were additions to the National Forest road system. These additions included constructing new local roads for vegetation management, acquisition related to Cooperative Road right-of-way agreements with the Montana Department of Natural Resource Conservation and Plum Creek Timber Company, database cleanup, and mostly from the acquisition of previously Plum Creek Timber Company lands located in the Swan Valley (411 miles). As a result of these additions and deletions, the total system road mileage on the Flathead National Forest has gone from 3,842 miles to 3,384 miles since 1995.

3. Transportation System and Road Density

On the Flathead National Forest, timber harvest, fuel reduction and recreation are the primary land management activities and they are supported by an extensive network of roads. Timber harvest has declined since 1995. At that time, the forest began a road decommissioning program as directed by Forest Plan Amendment #19, resulting in approximately 887 miles of road being decommissioned.

Streams may be affected directly by timber harvest and roads, especially when these activities are in close proximity. Indirect effects may occur due to changes in streamflow and/or sediment delivery processes. In addition, wildfire is major disturbance mechanism that changes short term and long term hydrologic patterns, aquatic habitat, and water quality.

Transportation development can have effects on watershed process and function and roads are a likely sediment source. The general effects of roads include soil erosion and the extension of channel networks via interception and routing of water. This effect increases with proximity to aquatic habitats. Road density by Geographic Area varies greatly across the Flathead National Forest (Table 7)

Table 8. Geographic area road density values

Geographic Area	NFSR Miles	FNF MI ²	Road Density
Salish Mountains	1186.99	412.76	2.88
Swan Valley	1061.19	568.00	1.87
Hungry Horse	573.72	447.59	1.28
North Fork	523.49	499.61	1.05
Middle Fork	113.25	246.96	0.46
South Fork	133.83	340.49	0.39

4. Road Budget and Maintenance

The Forest receives annual funding for the operation and maintenance (O&M) of NFSRs. The last two years the road O&M budget averaged \$895,000. The three years prior averaged \$1,599,000. That is an approximate 56% reduction in O&M funding over the last 5 years. Of this, approximately 55% of this amount is reserved for timber sale engineering support and planning, the remaining 45% is available for all road inventory, monitoring, analysis, contract administration, construction, operations, and maintenance.

Table 9. Miles of NFSR Receiving Maintenance, Percentage of Passenger Car System and Non-Passenger Car System Receiving Maintenance, and annual Road O&M Budget on the Flathead NF for the last five years.

Year	Miles of NFSR Receiving Maintenance	% of Passenger Car System Receiving Maintenance	% of Non- Passenger Car System Receiving Maintenance	NFSR O&M Budget
2013	690	62%	4%	\$858,900
2012	691	62%	2%	\$932,000
2011	1446	99%	22%	\$1,340,000
2010	1454	99%	20%	\$1,528,200
2009	1359	99%	17%	\$1,930,300

The overall trend affecting the Forest transportation system is that budgets for repairs and maintenance are expected to continue to decrease while national requirements and efforts for planning and maintenance continue to increase. During the past two decades, appropriated funding for roads construction and maintenance has decreased while the forest is spending more funding to meet safety standards, implement resource protection measures, and complete agency-required planning efforts.

In the last 10 years, the amount of decommissioning each year has decreased as the backlog of decommissioning is reduced and the A19 commitments under project level planning have been largely accomplished

Table 10. Miles of Road Decommissioned from 2003 to 2013 on the FNF

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Miles	37	42	28	47	42	48	22	55	12	13	4
Decommissioned											

Due to the annual nature of federal budgets, the forest is unable to accomplish larger scale road maintenance or construction projects such as resurfacing a paved road or replacing a bridge with the annual operations and maintenance funding. Some funds are reserved at the regional or national level for projects of this nature, and are awarded on a competitive basis. These funding sources are unpredictable. Though this competitive funding helps accomplish road maintenance projects on the Forest, it still falls short of the amount needed to adequately maintain the system.

5. Aviation

Table 11. Airstrips on the Flathead NF by Geographic Area

Geographic Area	Site Name	Remarks
Middle Fork	Schafer	Wilderness; maintained by USFS, open to public
South Fork	Meadow Creek	Front country; maintained by USFS, open to public
South Fork	Spotted Bear	Front country; maintained by USFS, open to public
Swan Valley	Condon	Front country; maintained by USFS, open to public

Table 12. Existing private airstrips within the Geographical Areas

Geographic Area	Site Name
Hungry Horse	Ryan Field
Middle Fork	none
North Fork	Moose City; Langston
South Fork	None
Swan Valley	Ferndale; Masonry Field
Salish Mountains	Wounded Buck Ranch, Abel Ranch, Flathead Lake Sky Ranch, Sanders, Braidwater Farm, Kalispell City, Weaver, Hoener, Glacier Park International, Whitefish, Rahn, Bates, Hanson, Cabin Creek Landing, Lone Hawk

Source: Montana Pilots Association, retrieved 1/9/2014

In the state of Montana, in 2011 there were 258 total airstrips: 121 are open for public use, 15 are commercial service airports and 134 are private airstrips (FAA US Civil Airman Statistics).