# Transportation System

## Introduction

The following desired conditions for the Forest's road transportation system are taken from Page II-54 of the 2006 Forest Plan.

> *The road network matches the level of management activities occurring on the Forest and supplies the transportation system needed for recreation, special uses, timber harvest, range management, minerals development, fire protection, and other resource management needs. The transportation network is managed, using a variety of tools, to reduce adverse effects to resources. Roads needed for long-term objectives are maintained to provide for user safety and resource protection. Roads not needed for long-term objectives are decommissioned and stabilized.*

There are a number of assumptions built into these desired conditions relative to safety, cost-effectiveness, and the minimum road system necessary for administrative and public use. First, a well-maintained road system is safer than one where maintenance and improvement do not occur in a timely and comprehensive manner. Second, the Forest has more roads now than it can properly maintain, not only due to the amount of roads present but also because of flat or declining funding to pay for maintenance. Third, eliminating unnecessary roads can make the maintenance and improvement of the remaining road system more cost-effective over time. Put another way, fewer roads means that a higher percentage of those roads can be properly maintained or improved with the same amount of funding, which in turn means that a higher percentage of roads will be safer for public and administrative use. Well-maintained roads should also have fewer impacts on other resources, such as soil, water, and fish habitat.

Of course, the same assumptions also apply to the trail transportation system. Trail maintenance is discussed in the Recreation Resources section of this report.

## 2010 Accomplishments

The Transportation System accomplishments for FY 2010 included:

- Budget and work planning, including out-year planning.
- Providing input, analysis, and review for various Forest projects.
- 707 replacement road signs.
- 216 miles of existing road improvement (reconstruction, paving).
- 3.1 miles of new road construction.
- 24.8 miles of road decommissioning. (7.4 miles system roads, 17.4 miles non-system roads)
- 1,487 miles of road maintenance by Forest, 127 miles of maintenance by gas well operators.
- Monitoring and evaluation efforts as described below.

## Monitoring and Evaluation

### FOREST PLAN MONITORING FOR TRANSPORTATION SYSTEM

The 2006 Forest Plan has two specific monitoring questions for transportation, found on page IV-10. These questions were numbers 32 and 33 in the Plan, but they have been changed to numbers 29 and 30 due to an administrative correction to the Plan that occurred in 2009.

> *29. To what extent is the Forest, in coordination with other public road agencies, providing safe, cost-effective, minimum necessary road systems for administrative and public use?*
>
> *30. To what extent are road and trails closures effective in prohibiting unauthorized motor vehicle use?*

Both questions respond to Goal RF01 in the 2006 Forest Plan:

> *Goal RF01 - Provide a transportation system that is safe, cost efficient, meets access needs, and minimizes adverse impacts to natural resources.*

Monitoring Questions 29 and 30 are to be monitored every 1-5 years.

***Monitoring Question 29. To what extent is the Forest, in coordination with other public road agencies, providing safe, cost-effective, minimum necessary road systems for administrative and public use?***

No specific monitoring occurred related to transportation system safety, cost-effectiveness, or size. This report is based on monitoring and evaluation of the accomplishments listed above.

***Monitoring Question 29. Evaluation, Conclusions, and Recommendations***

The Forest road transportation system was made safer in FY 2010 through various activities. The 707 replacement road signs increase motorist safety by providing additional or more easily read information about road names, hazards, restrictions, and distances to destinations. The 216 miles of road improvement and the 1,487 miles of road maintenance were completed by the Forest to enhance user safety and comfort. Improvements included the completion of paving roads to Spruce Knob (the highest point in West Virginia) and along Williams River (a very popular fishery). In addition, 127 miles of road were maintained by gas well operators.

During FY 2010 an estimated 24.8 miles of road were decommissioned (permanently closed and removed from the transportation system), of which 7.4 miles were system roads and 17.4 miles were non-system roads. Conversely, 3.1 miles of new road were constructed, resulting in a 21.7 mile net reduction in the Forest roads. This net reduction in the overall road system is cost-effective because the Forest will no longer have to pay to maintain, improve, or reconstruct the net loss of 21.7 road miles. This reduction also moves the Forest closer to the "minimum road system necessary for administrative and public use" and returns 65 net acres to land productivity.

The road improvement, maintenance, and decommissioning numbers cited above were unusually high in FY 2010 due primarily to a robust infusion of funding from the American Recovery and Reinvestment Act (ARRA) of 2009. This funding helped the Forest accomplish 4 times the road maintenance, 6 times the road decommissioning, and 16 times the road improvement miles in FY 2010 compared to FY 2009. The Forest was also able to accomplish 5 times the amount of sign replacement than in FY 2009. Although this amount of accomplishment is not to be expected every year, it does reflect what the Forest can do when provided with needed funding.

**Recommendations:** The Forest should continue to look for opportunities to improve road and traffic safety, and to move toward a more cost-effective and efficient road transportation system.

***Monitoring Question 30. To what extent are road and trail closures effective in prohibiting unauthorized motor vehicle use?***

One of the Chief's Four Threats to national forests in the 21st century is unmanaged recreation, particularly related to off road vehicle (ORV) use. The Monongahela's policy regarding ORV use is best expressed by Standards RF19 and Guideline RF20 in the Forest Plan:

> *Standard RF19 - Public motorized vehicle use is allowed on roads and trails designated open for use. Off road or trail use is not allowed. Off road motor vehicle travel restrictions do not apply to: 1) military, fire, emergency, law enforcement or administrative vehicles when used for official or emergency purposes, and 2) other vehicle use allowed by written authorization from the Forest Supervisor or District Ranger.*
>
> *Guideline RF20 - Vehicle use on closed roads by permittees, contractors, or other cooperators may be authorized to conduct official business or to perform resource management activities.*

The Forest currently has an estimated 894 roads of various types and maintenance levels. Only 155 (17 percent) of these roads are open to public motorized use year-round. Another 107 roads (12 percent) have seasonal closures. That means that 71 percent of Forest roads are closed year-round to public motorized use. Although these closures are useful management tools to provide remote wildlife habitat, reduce watershed and other resource impacts, and lower maintenance bills, they also frustrate and anger some members of the public who feel they have a right to access public lands whenever and however they see fit. The result is often illegal motorized use.

To help control illegal motorized use off roads or trails, or use on roads or trails closed to motor vehicles, the Forest uses road and trail closures that are typically a combination of signing and a physical barrier. Barriers may include gates, boulders, large earthen berms and ditches, or other means to physically prevent the passage of motorized vehicles. However, many barriers have been compromised, damaged, or removed, and they have not been repaired or replaced in a timely fashion.

The Forest also uses law enforcement to help control illegal motorized use. Indeed, the Forest's Law Enforcement Officer estimated that more than 20 percent of his time was spent on ORV and

road closure incidents in FY 2008. More telling may be the fact that 63 of the 147 total incident reports he generated that year were ORV/closure related.

***Monitoring Question 30. Evaluation, Conclusions, and Recommendations***

Illegal motorized use is not occurring on most of the Forest roads and trails that are closed to motorized vehicles. However, illegal use is still occurring, and it is dispersed across the Forest. Signs and barriers help control use but they are not infallible. Where users do not respect closures, signs and barriers are often destroyed, removed, or circumvented.

Law enforcement can also help control illegal use through periodic patrols, violation citations, and public education. In FY 2007, however, there was only one Forest Law Enforcement Officer to cover over 919,000 acres, 896 roads, and 850 miles of trail. Thus, his influence was limited. In FY 2008, the Forest hired two additional officers. Forest protection officers are also doing a better job of detecting and addressing illegal use. Incidents seem to be decreasing; however, problems are still occurring and the following recommendations are still applicable.

**Recommendations:** Forest law enforcement officers offer the following recommendations to address the ongoing problems caused by illegal motorized use:

- Replace damaged or stolen signs in a timely fashion, and provide new signs where needed. Enforcement actions may be limited or ineffective where system or user-created roads and trails and not signed to specify use restrictions.

- Upgrade barriers where needed. There are many places on the Forest where barriers have been damaged, removed, or circumvented to the point where they are no longer effective. This would be a good task for the Forest's road crew.

- Have Forest Protection Officers (these are regular employees who have a specified amount of law enforcement training) do more patrolling in problem areas and report findings to Forest Law Enforcement Officers in a timely fashion.

- Continue to educate the public about the problems that illegal motorized use can cause. Use posters, media messages, hunting/fishing regulations, and other outreach methods.

- Employ more Law Enforcement Officers or train more employee Forest Protection Officers to patrol road closures and regularly inspect barriers and signs.

- All Forest personnel need to pass on any observations of illegal off-road and gated road use to a Law Enforcement Officer and/or District Ranger.

- Explore innovative ways to procure funding or partnerships to help address concerns related to illegal motorized use.