

Chapter 6: Road & Structure Inspection & Maintenance

Road and structure inspection and maintenance are essential activities necessary to maintain the expected safety considerations, service life, economic investment and environmental protection on Forest Service roads.

This chapter describes the activities related to plans, assessments, works, and reports, including the following:

- professional responsibilities and considerations;
- understanding the different required levels of maintenance, and vehicle access objectives;
- preparing a maintenance plan;
- road maintenance inspections;
- assigning road maintenance inspection priorities and frequency of inspections based on engineering risk analysis;
- allocating maintenance funding;
- road maintenance works as appropriate, including clearing width, ditch and culvert, road prism, subgrade, road surface, and winter; and
- inspection and maintenance of structures, including bridges, major and other stream culverts, retaining walls, and other engineered structures.

This chapter presents the Ministry's mandatory requirements and best practices related to road maintenance inspections and the associated outputs. It is intended to provide the reader with enough detail to be able to understand the processes and mandatory procedures, as well as carrying out appropriate best practices to address the applicable regulatory requirements.

Note that for extensive road maintenance works such as major repairs to, or modifying or rebuilding a section of road, many of the practices that are described in the appropriate sections of [Chapter 5 Road Construction](#) will be applicable.

6.0.1 Policy

Forest Service roads that are maintained by the ministry, and all FSR bridges, major culverts, and other engineered structures, will be inspected and maintained, taking into consideration their level of use, strength and durability, and potential impacts on user safety and values at risk of damage or loss.

6.1 Mandatory Procedures & Best Practices

6.2 Road & Structure Inspection & Maintenance Professional Responsibilities & Considerations

- 6.2.1 Road Maintenance Works
- 6.2.2 Maintenance Plan
- 6.2.3 Inspections of Roads
- 6.2.4 Engineered Structure Inspection & Maintenance
- 6.2.5 Project Assurance

6.3 Road & Structure Maintenance Levels

6.4 Road Maintenance Inspections

- 6.4.1 Road Risk Ratings & Maintenance Inspection Priorities
- 6.4.2 Road Inspection Frequencies
- 6.4.3 Road Maintenance Inspection Reports

6.5 Engineered Structure Inspections

- 6.5.1 Types of Inspections
- 6.5.2 Structural Deficiencies Noted in Inspections for FSR Structures
- 6.5.3 Clarification of GVW as Applicable to Bridge Load Rating
- 6.5.4 Engineered Structure Inspection Frequencies
- 6.5.5 Engineered Structure Inspection Reports
- 6.5.6 Engineered Structure Inspection Documentation

6.6 Maintenance Budgets

6.7 Scheduling Maintenance Works

6.8 Road User Safety Considerations During Maintenance Works Operations

6.9 Routine Types of Road Maintenance Works

- 6.9.1 Clearing Width Maintenance
- 6.9.2 Ditch & Culvert Maintenance
- 6.9.3 Road Prism Maintenance
- 6.9.4 Subgrade Maintenance
- 6.9.5 Road Surface Maintenance
- 6.9.6 Winter Operations: Snowplowing & Sanding
- 6.9.7 Spring Break-Up: Temporary Vehicle Weight Restrictions

6.10 Routine Types of Structure Maintenance Works: Bridges & Stream Culverts

- 6.10.1 Bridge Maintenance
- 6.10.2 Stream Culvert Maintenance
- 6.10.3 Bridge & Major Culvert Replacement

6.11 Other Maintenance Works Along Roads

- 6.11.1 Fords
- 6.11.2 Weirs
- 6.11.3 Fences
- 6.11.4 Cattleguards
- 6.11.5 Signs

6.12 Resources & Suggestions for Further Reading

6.13 Appendices

- 6.13.1 Example Qualitative Vulnerability Tables
- 6.13.2 Project Tracking Checklist