



Office of Inspector General U.S. Department of the Interior

Evaluation Report



Department of the Interior Roads Programs The Dangers of Decentralization



United States Department of the Interior

OFFICE OF INSPECTOR GENERAL
Washington, DC 20240

FEB 01 2010

Memorandum

To: Assistant Secretary, Fish and Wildlife and Parks
Assistant Secretary, Indian Affairs
Assistant Secretary, Land and Minerals Management
Assistant Secretary, Water and Science

From: Mary L. Kendall *Mary L. Kendall*
Acting Inspector General

Subject: Department of the Interior's Roads Programs – The Dangers of Decentralization
(C-EV-MOA-0003-2009)

This memorandum transmits our evaluation report on the Department of the Interior's (DOI or Interior) roads programs. We performed this evaluation to determine if Interior's bureaus have identified and prioritized their roads needs, developed project implementation plans, and installed systems to account for funds expended toward roads projects.

We found significant inaccuracies in roads inventories that affect the ability of bureaus to identify needs correctly and inefficiencies in the processes that bureaus use to prioritize their needs. All bureaus have project implementation plans and the ability to track spending. Two of the bureaus, however, Bureau of Indian Affairs (BIA) and Bureau of Land Management (BLM), lack sufficient safeguards to adequately detect misuse and mismanagement of funds.

To improve management, increase consistency, and better communicate with the Department of Transportation (DOT), which jointly manages the majority of Interior roads, we recommend establishing one DOI-level office or group to oversee all DOI roads programs.

Please have a written response forwarded to this office within 30 days that identifies plans to address our findings and recommendation so that we may track the status of implementation. Should you have any questions, please do not hesitate to contact me at (202) 208-5745.

EXECUTIVE SUMMARY

Why We Performed This Evaluation

We evaluated the Department of the Interior's roads programs at the request of the Congress. We limited our focus specifically on answering the following four questions:

- Have the bureaus identified their roads needs?
- Do the bureaus have mechanisms in place for prioritizing their needs?
- Have the bureaus developed implementation plans for roads projects?
- Do the bureaus have systems in place to account for funds expended toward roads projects?

Our evaluation included roads programs at the Bureau of Indian Affairs (BIA), National Park Service (NPS), U.S. Fish and Wildlife Service (FWS), and the Bureau of Land Management (BLM). The Bureau of Reclamation (BOR) also manages roads; however, we excluded BOR from our evaluation due to its small roads inventory. (See Appendix A for a complete list of abbreviations and acronyms used throughout the report and Appendix B for our scope and methodology).

What We Found

We identified problems in the areas of:

Inventory: Significant inaccuracies exist in roads inventories that affect the identification of needs, skew funding levels, and may lead to either an overestimation or underestimation of public road miles.

Prioritization and Implementation: Inadequacies exist in prioritizing needs, as well as in implementing transportation plans. Not all bureaus have processes in place.

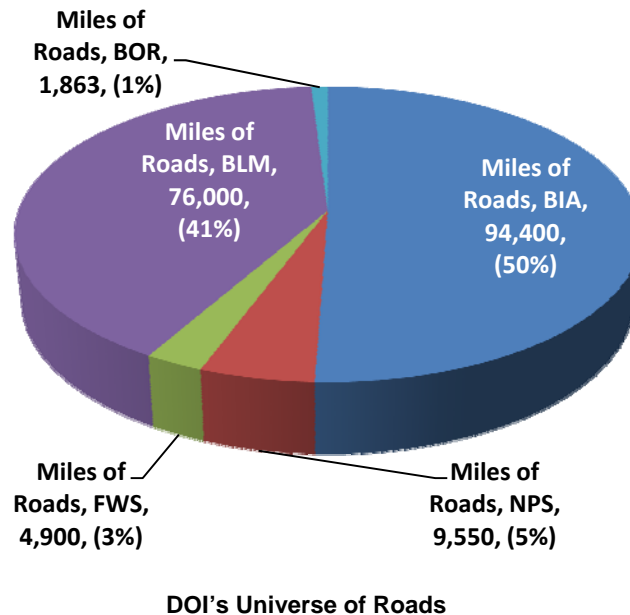
Accountability: All the bureaus reviewed have the ability to track spending. The way BIA and BLM track spending, however, brings into question their ability to adequately detect the misuse and mismanagement of funds.

Interior has not provided Department-level oversight to adequately manage its roads programs. Rather, each bureau is responsible for framing its own roads programs. We believe that this decentralization has led to the problems we have identified.

BACKGROUND ON ROADS PROGRAMS

Roads Universe

Five Interior bureaus manage approximately 186,713¹ miles of roads that are designated for either public or administrative use (see below). The roads inventory includes unpaved roads (primarily dirt and gravel) and paved roads. More than 50 percent of the total miles have been identified as being in poor condition.



The deferred maintenance costs² associated with DOI roads are estimated to be:

- \$181 million for BIA,
- \$4.9 billion for NPS,
- \$1.5 billion for FWS, and
- \$226 - \$276 million for BLM.

Roads Programs

The Departments of the Interior and Transportation jointly manage three programs through the use of memorandums of agreement. The responsible office within Transportation is Federal Lands Highway (FLH), which provides program stewardship and transportation engineering

¹ All numbers used in this evaluation are based on information provided by the bureaus, or FLH.

² Current as of January 2010.

services for the planning, design, construction, and rehabilitation of highways, roads, parkways, bridges, and transit facilities that provide access to or within federally owned lands, national parks, and Indian reservations. We briefly describe the jointly managed programs below.

The **Indian Reservation Roads (IRR) Program** provides funds for roads to, within, and through Indian reservations, whether owned by BIA or other State or local agencies. The IRR system consists of nearly 33,000 miles of public roads and 940 bridges owned by BIA and Tribal governments and over 61,000 miles of public roads owned by State and local governments and other entities. By way of comparison, the entire Interstate Highway System has a total length of 46,876 miles, less than half the mileage of the IRR system (94,400 miles of roads). Approximately 73,320 miles or 78 percent of IRR roads are unpaved.

The **Park Roads and Parkways (PRP) Program** provides funds for public roads that make access available to or within national parks, recreation areas, historic areas, or other NPS units. The inventory includes 9,550 miles of roads, as well as 1,414 bridges and 63 tunnels. Approximately 4,100 miles or 43 percent of the roads are unpaved.

The **Refuge Roads Program** provides funds for approximately 4,900 miles of public roads that grant access to or within units of the National Wildlife Refuge (NWR) System, as well as 265 bridges and 5,153 parking lots. The NWR System includes approximately 548 wildlife refuges in all 50 states, Puerto Rico, Guam, and the U.S. Virgin Islands. FLH funding is provided primarily for the design, reconstruction, maintenance, or improvement of Refuge Roads. Approximately 4,508 miles or 92 percent of the roads are unpaved.

Funding of Roads Programs

Funding for DOI roads programs comes from two primary sources.³ The first source is the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). SAFETEA-LU provides guaranteed funding for highways, highway safety, and public transportation over a 5-year period (FY 2005 – FY 2009) that totals \$244.1 billion. This amount includes \$4.5 billion for transportation projects on or accessing federal lands. For the bureaus with SAFETEA-LU authorizations (BIA, NPS, and FWS), FLH serves primarily as a pass-through vehicle.

**Title 23 U.S.C.
Safe, Accountable, Flexible, Efficient
Transportation Equity Act: A Legacy for
Users**

Signed into law by President George W. Bush on August 10, 2005, SAFETEA-LU governs U.S. federal surface transportation spending. The legislation expired September 30, 2009.

SAFETEA-LU funds can be used for transportation planning, research, engineering, and construction of highways, roads, parkways, and transit facilities within public lands, national

³ Specifics on the funding for FY 2008 and FY 2009 are provided in Appendix C.

parks, and Indian reservations; FLH projects are 100 percent federally funded. In addition, SAFETEA-LU funds can be used as the State/local match for most types of federal-aid highway funded projects.

| SAFETEA-LU Funding Levels | |
|---------------------------|-----------------------|
| DOI Program | FY2009 Funding Levels |
| Indian Reservation Roads | \$450 million |
| Park Roads and Parkways | \$240 million |
| Refuge Roads | \$29 million |

SAFETEA-LU does not fund routine maintenance of public roads. The Act, however, does permit up to 25 percent of the IRR Program funds to be used for the maintenance of the IRR System. The actual percentage of IRR funds for maintenance is determined by individual tribes.

The second source is DOI funding for construction and maintenance projects, which comes through as line items in bureau budgets. To obtain these funds, road projects must compete with other construction and maintenance projects within the respective bureaus.

WHAT WE LEARNED

Inaccuracies Skew Inventories

Maintaining an accurate inventory of roads and their condition is the first step in the successful management of a transportation network. NPS and FWS have well established, regularly updated, accurate road inventory and condition databases in place to help identify their needs. We found that BIA and BLM, the two largest road programs with respect to mileage, did not have adequate inventories.

We were told by bureau officials that, while BIA and BLM both maintain road inventories, their databases may not match their actual roads. In the case of BIA, we were provided information, both written and verbal, that shows a 60 percent increase in total IRR inventory miles from FY 2005 (62,000 miles) to FY 2007 (102,000 miles), a 40,000 mile unexplained increase.

BIA's mileage inventory may be inaccurate because:

- road mileage was underreported in previous years;
- tribes self-report road miles on their reservations with little to no on-site, independent verification performed; and,

- IRR funds are allocated using a formula that creates a situation in which tribes actually have an incentive to overstate assets to secure more funding.

These conditions may increase the likelihood of potential fraudulent activities within BIA.

Our observations also suggest that BLM underestimates its inventory. BLM program officials and staff personnel at State offices told us during interviews that BLM’s inventory is incomplete because some of the least used and poorest conditioned roads have been omitted (i.e., undocumented roads). BLM considers most of its 76,000 miles of documented roads to be for administrative and not public use. According to BLM documents, however, the public now uses many undocumented roads for multiple everyday life activities — particularly off-highway vehicle recreational use. Changing demographics, increased access, and shifting travel patterns have contributed to the public use of roads not designed or constructed for multipurpose or multivehicle use. These roads have proven to be difficult to identify and manage. Furthermore, unrestricted usage and access are causing BLM roads to deteriorate at higher than expected rates. This deterioration makes maintenance, which has often been deferred, essential to ensuring public safety. BLM’s current emphasis is on maintaining roads in its documented inventory. Consequently, other roads within the BLM network may go unattended. In some of the worst cases, BLM has decided to forego any attempts to maintain roads and to allow them to return to their original states. Potential liability issues could arise from this decision.

Without additional independent assessments to verify and validate the BIA and BLM inventories, we could not be assured that public funds are being spent in accordance with laws, regulations, and policies.

Problems Plague Project Prioritization and Implementation

Once needs have been identified, bureaus must prioritize or rank by importance the projects they wish to complete and then develop plans to implement the projects. Not only do prioritization procedures differ among the bureaus, implementation of projects varies greatly.

Both NPS and FWS have clearly defined priorities and processes in place to identify their needs. They routinely place a high emphasis on maintaining roads that are already in good condition by focusing their road maintenance spending on what are called “3R” maintenance activities — repair, resurfacing, and rehabilitation. They spend less on the “4R” reconstruction projects, which tend to be substantially more expensive. They believe that performing 3R maintenance on roads already in fair or good condition extends the service life of those surfaces and saves money in the end.

Road Maintenance Definitions

3R refers to Repair, Resurfacing, and Rehabilitation of existing roads and directly addresses deferred maintenance concerns.

4R refers to Reconstruction projects and includes realignment of existing roads or upgrade replacement roads, e.g. replacing a gravel road with a paved road. 4R projects require an environmental review.

While we are not in a position from an engineering perspective to judge the merits of this method of prioritization, it is apparent that roads in poor condition could go unmaintained. Such lack of maintenance drives up the deferred maintenance backlogs and causes the most expensive, time-consuming work to be delayed — an issue well noted in previous report findings.⁴

The prioritization processes for BIA and BLM are less well defined than those observed with NPS and FWS. BIA's prioritization process appears to be more decentralized and driven by tribal input. BIA requires tribes to submit 5-year Transportation Improvement Plans (TIPs)⁵ to FLH for approval but allows the tribes to alter their plans as often as they wish. In at least one instance, a high turnover rate in tribal leadership combined with shifting priorities and unrestricted plan alterations defeated the purpose of long-term planning and prioritization. BLM also requires State offices to submit 5-year TIPs, although we discovered that not all States meet this requirement, which makes long-term planning equally difficult.

We found that both NPS and FWS have clearly articulated implementation plans and processes. FWS produced a series of project checklists and individual project agreements with FLH. As part of its implementation process, FWS has a Stewardship and Oversight Agreement with FLH that covers planning, programming, construction, reconstruction, and improvements related to public use roads and bridges. The quality assurance/quality control component within the plan has yet to be implemented fully, however, which brings into question FWS's ability to ensure appropriate oversight. We found no significant issues with NPS.

BIA and BLM identified their 5-year TIPs as their implementation plans. Neither bureau provided plans as extensively detailed as those observed with NPS and FWS.

Accountability Is Lax

While NPS and FWS manage roads funds quite well, neither BIA nor BLM have exercised sufficient oversight to ensure that roads funds are being properly managed and used for intended purposes.

Specifically, BIA lacks control of its accounting practices and cannot ensure appropriate funds use. The OIG exposed this failure previously in its flash report⁶ on the BIA Alaska Region's abuse of IRR funding. For example, use of the formula that determines allocation of the majority of IRR funds allows tribes to misrepresent road mileage and conditions under their domains. The two largest factors in the formula are vehicle miles traveled (VMT) and cost to construct (CTC). VMT is the sum of the length of IRR route segments in a tribe's inventory multiplied by the average daily traffic of each route segment. CTC is the total cost required to bring the transportation facility up to industry standards. These two factors make up 80 percent of the

⁴ GAO-09-425T. Department of the Interior Major Management Challenges reported testimony by Robin M. Nazzaro, Director, Natural Resources and Environment, that pertained to a discussion on reducing Interior's deferred maintenance backlog.

⁵ The TIPs identify road projects for resurfacing, restoration, and rehabilitation.

⁶ DOI OIG Flash Report: BIA Alaska Regional Indian Reservation Roads Program Rife with Mismanagement and Lacking Program Oversight. WR-IV-BIA-0001-2009, February 2009.

formula; both are dependent on self-reported data. BIA has no controls to confirm that self-reported data are accurate.

After the allocations are calculated, funding is provided to the tribes in a lump sum. Legally, this funding can only be used on projects that have been identified in an FLH-approved TIP. Neither FLH nor BIA, however, appears to have the resources needed to adequately monitor and verify how money is being spent. Combined with inadequate inventory oversight, no accurate method is in place for either agency to ensure that funds are spent appropriately.

Our interviews with BLM Washington Office officials revealed that, in some instances, field offices are not using roads funding for its designated purposes and that BLM State offices do little or no follow-up. BLM's ability to follow-up has been hampered by a recent switch to new accounting software, the Financial and Business Management System (FBMS). FBMS does not assign unique annual road maintenance project codes. As reported by BLM and confirmed during our evaluation, funds cannot be readily tracked on a per-project basis.

To its credit, BLM is currently taking steps to correct this problem through the development of an interface between the Facility Asset Management System and FBMS. By doing so, BLM officials believe they will have greater control over project funds. BLM, however, provided no timeline for completion of this initiative.

Without a formal process to track funds and check for improper use, the risk of wasteful or fraudulent use of public money is and will remain unacceptably high. Greater management oversight and incentives are needed to compel tribes (under BIA) and field offices (under BLM) to properly account for roads funding.

WHAT IS WORKING

Out of all the bureaus evaluated, NPS was the only bureau that used an automated road analyzer system for inventory and condition assessments as part of its Road Inventory Program (RIP)⁷. This system provides an accurate and objective report on pavement condition, which allows officials to efficiently prioritize and allocate funding. It is likely that other bureaus found using a pavement analyzer to be cost prohibitive due to their low percentage of paved roads. As a way of standardizing pavement assessments for cost-efficiency, sharing automated road analysis systems across bureaus could be a universally beneficial solution.

NPS also has the most promising process in place for project implementation and accounting of funds. Although most bureaus had 5-year plans and some had project delivery guidance, none had plans as extensive as those in place at NPS. NPS and FLH jointly published the "Park Roads and Parkways Program Handbook, Guidelines for Program Implementation," a 63-page document that outlines and explains every aspect of the Program. The Handbook includes Program goals, performance measures, funding sources, joint and individual responsibilities of

⁷ The Federal Highway Administration RIP for NPS collects roadway condition data on paved asphalt surfaces, including roads, parkways, and parking areas in national parks nationwide.

the two agencies, transportation planning, Program development, funds management, and project delivery.

We also found the NPS project tracking system to be the most robust system of its type within the bureaus evaluated. The PRP Transportation Allocation and Tracking System (PTATS) allow both NPS and FLH to request, approve, allocate, and track funding for each individual project undertaken. It also interfaces with NPS's Administrative Financial System and tracks funding for the individual stages of project planning, development, construction engineering, administration, and actual construction. In fact, FWS, itself, has seen this tracking system as a promising practice and is currently developing software to match NPS capability.

CONCLUSIONS

Overall, we found that Interior exercises no centralized oversight of roads program activities within the bureaus. The resultant decentralization has led to a number of inconsistencies and adversely affected program transparency and efficiency, funds accountability, and most importantly public safety. With such large percentages of roads in poor condition, the number of accidents seems certain to increase, along with resultant physical harm. In turn, Interior has placed itself in jeopardy of litigation. Decisions made to refrain from or avoid performing roads maintenance risk charges of negligence.

From our conversations with DOT, we know that at least one department, the Department of Defense, has a centralized entity related to roads programs. FLH and the Military Surface Deployment and Distribution Command (SDDC) jointly administer the Defense Access Roads Program. SDDC oversees the selection and prioritization of funding for all road-related activities recommended by the individual DOD Services.

RECOMMENDATION

Based on our findings, we strongly recommend that Interior:

Establish a DOI-level office or group able to provide centralized, consistent, systematic oversight of the different FLH-supported roads programs and to serve as a focal point for interaction with DOT.

ABBREVIATIONS, ACRONYMS, AND OTHER REFERENCE TERMS

| | |
|--------------------------|---|
| BIA | Bureau of Indian Affairs |
| BLM | Bureau of Land Management |
| BOR | Bureau of Reclamation |
| CTC | Cost to Construct |
| Interior or DOI | Department of the Interior |
| Transportation or DOT | Department of Transportation |
| FBMS | Financial and Business Management System |
| FLH | Federal Lands Highway |
| FWS | U.S. Fish and Wildlife Service |
| IRR | Indian Reservation Roads |
| NPS | National Park Service |
| NWR | National Wildlife Refuge |
| PRP | Park Roads and Parkways |
| PTATS System | Park Roads and Parkways Transportation Allocation and Tracking |
| RIP | Road Inventory Program |
| SAFETEA-LU | Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users |
| TIP | Transportation Improvement Plan |
| VMT | Vehicle Miles Traveled |

SCOPE AND METHODOLOGY

We performed this evaluation in accordance with the President's Council on Integrity and Efficiency and the Executive Council on Integrity and Efficiency "Quality Standards for Inspections." The evaluation focused on the identification and prioritization of the needs of Interior's roads programs, as well as the implementation of roads projects and accounting of roads funds.

Specifically, we reviewed program documents and selected reports (Appendix D); conducted interviews with key personnel from each of the bureaus; and performed site visits to a limited number of locations to ascertain the scale of the various roads programs. We also conducted limited interviews with FLH personnel.

We believe that the work performed provides a reasonable basis for our conclusions and recommendations. As part of our evaluation, we:

- obtained a general understanding of roads programs managed by BIA, NPS, FWS, and BLM;
- conducted site visits and interviewed officials from the various Interior bureaus;
- interviewed DOT officials from FLH;
- reviewed documentation and reports internal to the respective bureaus and the sites we visited;
- performed other work that we considered necessary; and
- reviewed laws and regulations that prescribe the requirements of roads programs on federal lands. This included Title 23 U.S.C.; SAFETEA-LU; the Government Performance and Results Act; and the Tribal Self Governance Act of 1994.

| FUNDING LEVELS AND SOURCES FOR DOI ROADS | | | | | |
|--|---------------------------|--|--------|------------|--------|
| | | FUNDING SOURCE (in Millions of Dollars) | | | |
| | | FY 2008 | | FY 2009 | |
| BUREAU | PROGRAM/ACTIVITY | SAFETEA-LU | DOI | SAFETEA-LU | DOI |
| BIA | IRR (including bridges) | \$410 | - | \$450 | - |
| | Maintenance ⁸ | \$102.5 | \$25.6 | \$112.5 | \$26.0 |
| NPS | Park Roads and Parkways | \$225 | - | \$240 | - |
| | Construction ⁹ | - | \$122 | - | \$149 |
| | Maintenance ¹⁰ | - | \$336 | - | \$373 |
| FWS | Refuge Roads | \$29 | - | \$29 | - |
| | Maintenance ¹⁰ | - | \$67.8 | - | \$67.8 |
| BLM | Construction ⁹ | - | \$6.4 | - | \$6.6 |
| | Maintenance ¹⁰ | - | \$68.4 | - | \$67.9 |

⁸ Up to 25 percent of a tribe's IRR Program funds may now be used for the purpose of IRR system maintenance, as defined in 25 CFR § 170. BIA retains primary responsibility for IRR maintenance through DOI appropriations.

⁹ Funding for all bureau construction related projects — not limited to road projects.

¹⁰ Funding for all bureau maintenance related projects — not limited to road projects.

SELECTED REPORTS REVIEWED

- GAO-09-425T: Department of the Interior, Major Management Challenges
- GAO-09-435T: Transportation Programs, Challenges Facing the Department of Transportation and Congress
- GAO-09-316: Highway Trust Fund: Improved Solvency Mechanisms and Communication Needed to Help Avoid Shortfalls in the Highway Account
- U.S. Department of the Interior, Office of Inspector General, Report No. WR-IV-BIA-0001-2009, February 2009: BIA Alaska Regional Indian Reservation Roads Program Rife with Mismanagement and Lacking Program Oversight
- U.S. Department of the Interior, Office of Inspector General, Report No. C-RR-BIA-0010-2006: Program Assessment Rating Tool, Review of Bureau of Indian Affairs Road Maintenance Program
- Expectmore.gov, Program Assessment: Bureau of Indian Affairs — Operation and Maintenance of Roads
- Expectmore.gov, Program Assessment: Federal Lands Highway Program

Report Fraud, Waste, Abuse , and Mismanagement



Fraud, waste, and abuse in government concerns everyone: Office of Inspector General staff, Departmental employees, and the general public. We actively solicit allegations of any inefficient and wasteful practices, fraud, and abuse related to Departmental or Insular Area programs and operations. You can report allegations to us in several ways.



By Mail:

U.S. Department of the Interior
Office of Inspector General
Mail Stop 4428 MIB
1849 C Street, NW
Washington, D.C. 20240

By Phone

| | |
|-----------------------|--------------|
| 24-Hour Toll Free | 800-424-5081 |
| Washington Metro Area | 703-487-5435 |

By Fax

703-487-5402

By Internet

www.doioig.gov/hotline