GAO Report (17-423), "Better Data Could Improve Road Management and Inform Indian Student Attendance Strategies"

TTPCC Meeting ABQ, NM August 15–17, 2017



441 G St. N.W. Washington, DC 20548

December 21, 2015

Mr. Douglas A. Glenn Director, Office of Financial Management Department of the Interior 1849 C Street, NW, MS--2557 Washington, DC 20240

Attention: Nancy Thomas

Dear Mr. Glenn,

This letter is to inform you of a new U.S. Government Accountability Office engagement on road conditions on tribal lands—code 100516. The enclosure provides information on the engagement. If we determine it is necessary to visit locations other than those specified in the enclosure, we will advise you.

We would appreciate your notifying the appropriate officials of this work. The next step will be to set up an entrance conference. At that meeting, we will request that your agency identify a point of contact for this engagement.

Sincerely yours.

Anne-Marie Fennell

Director

Natural Resources and Environment

Enclosure

Enclosure

Information on New Engagement

Engagement subject: Road conditions on tribal lands

Engagement code: 100516

Source for the work: GAO is beginning this work pursuant to its authority under 31 U.S.C. 717 after receiving a request from Ranking Member Peter DeFazio of the U.S. House Committee on Transportation and Infrastructure and Representative Ann Kirkpatrick.

Issue(s) under review/Objective(s)/Key question(s):

- What are the roles of the federal and tribal governments in funding, constructing, and improving roads on tribal lands?
- What do the National Tribal Transportation Facility Inventory (NTTFI) and other data indicate about road conditions on tribal lands?
- What is known about the connection between road conditions on tribal lands and school attendance?

Agencies and anticipated locations (HQ and field) to be notified: Bureau of Indian Affairs, Bureau of Indian Education; Headquarters, field locations will be determined at a later date.

Other departments/agencies to be contacted: Department of Transportation / Federal Highway Administration / Federal Lands Highway / Tribal Transportation Program

Estimated start date for the work: Immediately

Time frame for holding the entrance conference: As soon as possible

GAO Team(s) performing the engagement: Physical Infrastructure

GAO contacts:

Rebecca Shea, Acting Director, 202-512-6364 and SheaR@gao.gov Mike Armes, Assistant Director, 202-512-5330 and ArmesM@gao.gov Irina Carnevale, Analyst in Charge, 202-512-8767 and Carnevalel@gao.gov

Scope of work

- Letter of December 21, 2015 from GAO to DOI:
- Scope:
 - What are the roles of the federal and tribal governments in funding, constructing, and improving roads on tribal lands?
 - What do the National Tribal Transportation Facility Inventory (NTTFI) and other data indicate about road conditions on tribal lands?
 - What is known about the connection between road conditions on tribal lands and school attendance?

Introduction to Engagement Letter

- U.S. Government Accountability Office engagement on road conditions on tribal lands—code 100516
- Source for the work: GAO is beginning this work pursuant to its authority under 31 U.S.C. 717 after receiving a request from Ranking Member Peter DeFazio of the U.S. House Committee on Transportation and Infrastructure and Representative Ann Kirkpatrick.

Scope of Work (Rev. 1)

- Letter of May 31, 2016 from GAO to Oglala Tribal Chairman (cc: Gishi):
- Scope change:
 - 1) What is known about the effectiveness of the Department of Transportation and Department of the Interior transportation programs in funding, improving, and maintaining roads on tribal lands?
 - 2) What do the National Tribal Transportation Facility Inventory (NTTFI) and other data indicate about road conditions on tribal lands?
 - 3) What is known about the connection between road conditions on tribal lands and school attendance?

Scope of Work (Rev. 2)

- Email of November 7, 2016 from GAO:
- Update: We have completed the majority of our audit work and have begun drafting our report to address the following research objectives.
- Research Objectives:
 - To what extent do the National Tribal Transportation Facility Inventory (NTTFI) and Deferred Maintenance Reporting (DMR) system provide reliable data about road conditions on tribal lands?
 - 2. What are the challenges in funding, improving, and maintaining roads on tribal lands?
 - 3. What is known about the connection between road conditions on tribal lands and school attendance?

Final Report- GAO (17-423)

- Title: TRIBAL TRANSPORTATION "Better Data Could Improve Road Management and Inform Indian Student Attendance Strategies"
- Pages: 79
- Recommendations: 8
- Kickoff: Jan. 2016
- Publication: May 2017

Recommendations

- ▶ 6 for Bureau of Indian Affairs (BIA) Transportation
 - 3 related to National Tribal Transportation Facility Inventory (NTTFI) database
 - 3 relative to Deferred Maintenance Reporting (DMR) database
- 2 for Bureau of Indian Education (BIE)
 - See Report

Summary

- What GAO Recommends
- GAO is making eight recommendations including that BIA, in coordination with stakeholders, reexamine the need for NTTFI data and improve the quality of DMR data, and
- that BIE provide guidance to collect transportation related absence data. Interior agreed with five of the recommendations, did not take a position on two, and disagreed with one. GAO continues to believe its recommendations are valid, as discussed further in this report.

What GAO Found

- Indian Affairs (BIA) include some data fields useful for identifying tribal roads eligible for federal funding, but other fields may be too inaccurate to be useful for performance reporting and oversight. Specifically, the National Tribal Transportation Facility Inventory (NTTFI) provides useful data for identifying the roughly 161,000 miles of roads on tribal lands that are eligible for federal funding.
- However, the purpose for which these data are used has changed, and GAO found incomplete and inconsistent road-description and condition data, raising questions about the continued value of collecting these data.

What GAO Found (cont.)

Similarly, BIA's Deferred Maintenance Reporting (DMR) system provides useful data on roughly 29,000 miles of BIA-owned roads eligible for federal funding, but GAO found inaccuracies in fields related to road-condition and roadmaintenance needs. BIA does not document its road-maintenance cost estimates, and some tribes underreport performed maintenance. As a result, budget justification and performance reporting using these fields may not accurately reflect maintenance costs and needs. Federal standards for internal control suggest agencies design information systems and use quality information to achieve objectives.

GAO Report: Recommendations

National Tribal Transportation Facility Inventory (NTTFI) Recommendations:

- We are making eight recommendations to the Secretary of the Interior. To help ensure that NTTFI is able to provide quality information to support management and program oversight efforts, we recommend that the Secretary of the Interior direct the Assistant Secretary-Indian Affairs to take the following three actions:
- coordinate with the FHWA and tribal stakeholders and reexamine the need for road-description and condition data currently collected in the NTTFI and eliminate fields that do not serve an identified purpose,
- for fields determined to have continued relevance for management and program oversight take steps to improve the quality of these data by clarifying guidance in the NTTFI coding guide that tribes use to collect data and by providing additional guidance on steps needed to ensure that data are consistently reported, and
- establish a process to monitor data to facilitate timely and targeted corrections to missing or erroneous data.

GAO Report: Recommendations (cont.)

- Deferred Maintenance Reporting (DMR) Recommendations:
 - To improve the DMR, we recommend that the Secretary of the Interior direct the Assistant Secretary– Indian Affairs to take the following three actions:
 - develop a means to document when the level of service for each road section was last evaluated,
 - develop and maintain documentation supporting the unit costs of maintenance used to estimate maintenance needs, and
 - develop a process for more complete and accurate reporting occurring under existing authority of RMP funds expended for performed maintenance on BIA roads

GAO Report: Recommendations (for BIE)

- Bureau of Indian Education Recommendations:
 - To improve data on reasons for student absences, we recommend that the Secretary of the Interior direct the Assistant Secretary-Indian Affairs to provide guidance to BIE schools to collect data on student absences related to road and weather conditions.
 - To best align resources allocation decisions to needs, we recommend that the Secretary of the Interior direct the Assistant Secretary-Indian Affairs to review the formula to fund transportation at BIE schools and determine, with BIA and tribal stakeholders, what adjustments, such as distinguishing between gravel and paved roads, are needed to better reflect transportation costs for schools.

Agency Comments and GAO Evaluation

- Draft provided to BIA Transportation and BIE for review and comment. The Departments of Transportation and Education provided technical comments, which we incorporated in the report, as appropriate.
- Interior agreed with five of the eight recommendations and described actions under way or planned to address them.
- Interior neither agreed nor disagreed with two of our recommendations and did not agree with one of our recommendations. Comments are found in appendix VI of the report.

- Summary of BIA comments NTTFI:
 - Interior agreed with three recommendations for ensuring that NTTFI can provide quality information to support management and program oversight efforts.
 - Interior said that eliminating fields that do not serve an identified purpose will reduce the large amount of missing and erroneous data and noted that it will take steps to improve the quality of data by updating the NTTFI coding guide.

- Summary of BIA comments on Deferred Maint. Reporting:
 - Interior agreed with two of the recommendations for improving DMR and disagreed with one.
 - Interior agreed to document when the level of service for each road section was last evaluated. Interior noted it would take this action for roads and bridges that have been reconstructed or improved and for roads that have been evaluated at a condition level of fair or better since the last reporting cycle. Interior said that it is taking this approach because it believes improvement to level of service can only occur with reconstruction and not solely from road maintenance. This is a good first step towards addressing our recommendation. However, we continue to believe that Interior also needs to know the level of service and needs to periodically evaluate and document the evaluation date for all roads in order to effectively identify and prioritize road maintenance needs.

- Summary of BIA comments on Deferred Maint. Reporting:
 - Interior agreed to develop and maintain documentation supporting unit costs of maintenance used to estimate maintenance needs.
 - Interior intends to take this action for tribes it directly serves,
 - GAO Comment: "While we understand that tribes not directly served by BIA may not have to report documentation of maintenance costs, BIA should continue to obtain information from all tribes or other sources through other means that are available and document the unit-cost estimates for maintenance of all BIA roads. This will enable Interior to develop
 complete and reliable cost estimates for all BIA roads."

- Summary of BIA comments on Deferred Maint. Reporting:
 - Interior disagreed with the recommendation to improve the DMR by coordinating with tribal stakeholders to develop a process for complete and accurate reporting of Road Maintenance Program (RMP) funds expended for maintenance performed on BIA roads.
 - Interior stated that this action cannot be reasonably accomplished as it conflicts with the intent of federal law and the minimum reporting requirements when a tribal entity takes over the daytoday actions and tasks of a program.
 - GAO comment: In response to Interior's concerns we have revised our recommendation to clarify that Interior should develop a reporting process that can be implemented with existing authority. We continue to believe that Interior can develop a reporting process for the RMP and could request tribes with self-determination contracts and self-governance compacts to follow such a process and could implement such a process for tribes that it serves directly. By coordinating with tribes and encouraging their self-reporting of RMP funds expended for maintenance as well as improving data collected on RMP activities that Interior administers, Interior can improve the reporting of maintenance performed on BIA roads and would be better positioned to provide Congress with more accurate and complete information for funding decisions.

Next Steps

- ▶ 60 day report sent (August 9, 2017) to members of Congress on how BIA will partner with stakeholders in implementing the recommendations.
- Timelines (dates and responsible persons) outlined in report summary to Congress.
- Coordinate with FHWA and Tribes (TTPCC) on proposal of how to address the 6 recommendations/responses.

Recommendation1:

- Distinguish between NTTFI and RIFDS data
- Data in certain fields are no longer needed and have been identified as inaccurate and inconsistent
- What the fields we maintain and what fields do we eliminate?
- "the data in the NTTFI will be reexamined and the data fields that do not serve an identified purpose under the current authorization and regulation will be eliminated. This could result in up to a 56 percent reduction in the number of data elements in the NTTFI."

	Class	1,2,4,5		3,6,7		8,9		10	Bridges		11
	Construction Need	0,1,2,3	4	0,1,2,3	4	0,1,2,3	4	All	0,1,2,3	4	All
1-3	Region, Agency, Reservation	R	R	R	R	R	R	R	R	R	R
4	Route Number	R	R	R	R	R	R	R	R	R	R
5	Section Number	R	R	R	R	R	R	R	R	R	R
6	Class	R	R	R	R	R	R	R	R	R	R
7	Length	R	R	R	R	R	R	R	F	F	R
8	Bridge Number	F	F	F	F	F	F	F	R	R	F
9	Bridge Condition	F	F	F	F	F	F	F	R	R	F
10	Bridge Length	F	F	F	F	F	F	F	R	R	F
11	County	R	R	R	R	R	R	R	R	R	F
12	Congressional District	R	R	R	R	R	R	R	R	R	F
13	State	R	R	R	R	R	R	R	R	R	F
14	Ownership	R	R	R	R	R	R	R	R	R	F
15	Construction Need	R	R	R	R	R	R	R	R	R	F
16	Terrain	R	R	F	F	F	F	F	F	F	F
17	Foundation/Roadbed Condition	R	R	R	R	F	F	F	F	F	F
18	Wearing Surface Condition/SCI	R	R	R	R	F	F	F	F	F	F
19	Surface Width	R	R	R	R	R	R	0	F	F	F
20	Surface Type	R	R	R	R	R	R	0	F	F	F
21	Federal Aid Category	R	R	R	R	R	R	F	F	F	F
22	ROW Status Code	R	R	R	R	R	R	F	F	F	F
23	ROW Width	R	R	R	R	R	R	F	F	F	F
24	CTC Percent Eligible	C1	C1	C1	C1	C1	C1	F	C1	C1	F
25	% Incidental Cost	C2	C2	C2	C2	C2	C2	F	F	F.	F
26	Shoulder Width	R	R	R	R	F	F	F	F	F	F
27	Shoulder Type	C3	C3	C3	C3	F	F	F	F	F	F
28	ADT	C4	C4	C4	C4	C4	C4	F	F	F	F
29	ADT Year	C5	C5	C5	C5	C5	C5	F	F	F	F
30	% Trucks	C6	C6	C6	C6	F	F	F	F	F	F
31	Owner Number	C7	C7	C7	C7	C7	F	F	F	F	F
32	Roadway Width	D	D	D	D	D	D	D	F	F	F
33	ADT EST Year + 20 (FADT)	D	D	D	D	D	D	F	F	F	F
34	Adequate Design Standard ADS	D	D	D	D	D	D	D	F	F	F
35	Future Surface Type	D	D	D	D	F	F	F	F	F	F
36-40	Five Adj. Construction Costs	D	D	D	D	D	D	D	F	F	F
41	Drainage Condition	0	F	0	F	0	F	F	F	F	F
42	Shoulder Condition	0	F	0	F	0	F	F	F	F	F
43	# RR Xing	0	F	0	F	0	F	F	F	F	F
44	RR Xing Type	C8	F	C8	F	C8	F	F	F	F	F
45	ROW Utility Code	0	F	0	F	0	F	F	F	F	F
46	ROW Cost	0	F	0	F	0	F	F	F	F	F
47	Level of Maintenance	0	F	0	F	0	F	F	F	F	F
48	Snow and Ice Control	0	F	0	F	0	F	F	F	F	F
49	Beg and End Lat & Long	0	0	0	0	0	0	0	0	0	F
50	Atlas Map Number	0	0	0	0	0	0	0	0	0	0
51	Grade Deficiencies	0	F	0	F	0	F	F	F	F	F
52	Sight Deficiencies	0	F	0	F	0	F	F	F	F	F
53	Curve Deficiencies	0	F	0	F	0	F	F	F	F	F
54	Stopping Deficiencies	0	F	0	F	0	F	F	F	F	F
55		0	F	0	F	0	F	F	F	F	F
	Safety Study	0	F	0	F		F	F	F	F	F
56	Road Purpose Code	R	F	R	F	O R	F	F	F	F	F
57	Date of Construction Change	R D	D	R D		R D			D		
58	Date of Update				D		D	D		D	D
59	Field Remarks	0	0	0	0	0	0	0	0	0	0
60	DOT Remarks (DOT USE ONLY)	-	F	F	F	F	F	F	F	F	F

Recommendation 2:

- for relevant fields:
 - take steps to improve the quality of these data by clarifying guidance in the NTTFI coding guide that tribes use to collect data and by providing additional guidance on steps needed to ensure that data are consistently reported.
- TTPCC workgroup currently has this on its list of work items (prioritize)
- "take steps to improve the quality of data by clarifying guidance in an updated NTTFI coding guide for fields that specifically apply to the TTP and program management oversight reporting requirements."

Recommendation 3:

- BIA will reexamine and eliminate fields that do not serve an identified purpose. This process should result in a substantial reduction in the amount of missing and erroneous data.
- The BIA and FHWA will also cross-reference data maintained by other public authorities and, where discrepancies arise, defer to publicly available information from data bases generated by each specific public authority.

- Recommendation 4:
 - the BIA will develop additional procedures to determine the level of service (LOS) for each road section and document the date each road/bridge section was evaluated
 - Step 1: Excellent, Good and Fair BIA facilities
 - Step 2: Poor and Failing

Recommendation 5:

- the BIA will reassess the tables of unit costs and work with the tribes and BIA field personnel to improve the data sources for typical costs of maintaining assets to the extent permitted by law and utilize the additional information to update the tables used in computing the annual deferred maintenance for roads, bridges, and equipment replacement.
- Provide TA to tribes who have contracted RM functions

Recommendation 6:

- where BIA delivers the RMP by direct service, the BIA will work with those BIA agency offices to continue to collect this information.
- In addition, BIA will also continue working through known tribal transportation committees, subcommittees, and tribes that contract the road maintenance program under an ISDEAA contract with self-reporting options on performance and needs.

Next Steps

- Workgroup assignment(s) for recommendations and input
- Meeting schedules (additional meetings) to accomplish
- NTTFI and DMR issues

Questions/Discussion