

FINANCIAL ANALYSIS

1. The Yunnan Sustainable Road Maintenance (Sector) Project will finance the periodic maintenance or rehabilitation of about 1,000 kilometers (km) of highways in Yunnan Province in the People's Republic of China—890.0 km under output 1 and 112.8 km under output 2. The highways do not charge tolls or earn revenues. Their sustainability will depend upon the technical and financial capacity of the Yunnan Highway Administration Bureau (YHAB), which is the implementing agency and responsible for maintaining the trunk road network. An analysis of the YHAB's future revenues and maintenance needs, using the international standard Highway Development and Management Model software, confirmed long-term sustainability of YHAB, based on the with-project case situation.

A. Financial Projections

2. The YHAB's principal source of revenues is a fuel tax, which amounted to CNY1,700 million in 2011. This allocation corresponds to about 27% of the total amount of fuel tax revenues received by the Yunnan Provincial Department of Transport (YPDOT), the executing agency. The YHAB also collects truck overloading fees (CNY370 million in 2011), as well as some toll revenues (CNY20 million in 2011). It also has access to commercial bank lending and other smaller budget sources, which totaled CNY107 million in 2011. Financial projections were based on assumptions of (i) a fixed 6% annual increase in the total amount of fuel tax collected by the province, (ii) a 5% annual increase in overloading and toll revenues, and a (iii) a 2% increase in other revenues.

3. The main drivers of YHAB expenditures in 2011 are (i) staff pensions (CNY715 million); (ii) staff salaries and benefits (CNY766 million); (iii) other management costs, such as those for buildings, equipment, and research (CNY191 million); (iv) routine and emergency maintenance works (CNY407 million); and (v) periodic maintenance and rehabilitation (CNY160 million). Financial projections were based on (i) projections of a 7% annual increase in pension costs, with a decline to 4% after 2022 to reflect the YHAB's pension policies and work force age structure, (ii) a 5% annual increase in staff salaries, and (iii) a 5% annual increase in the unit costs of civil works. In the more aggressive scenario 3, a cost reduction of 5% was applied to civil works and staff costs to reflect the potential impact of increased maintenance outsourcing. Routine maintenance needs were forecast using the Highway Development and Management Model (HDM-4) software, based on the predicted condition of the road pavement. To match revenues with expenditures, leftover revenues were allocated to periodic maintenance and rehabilitation.

4. Under all three scenarios, the analysis found that YHAB would have sufficient revenues to match its staff costs and routine maintenance needs during the 2013–2022 period and beyond. In the first scenario, YHAB could dedicate an average of CNY320 million annually to periodic maintenance and rehabilitation. This allocation rose to CNY830 million under the second scenario and to CNY1,400 million under the third.

B. Financial Analysis

5. The government has committed to implement a maintenance budget trajectory and strategy corresponding to the second scenario. The YPDOT will provide the YHAB with a higher allocation of fuel tax revenues. The additional resources will be used for periodic maintenance and rehabilitation. Based on the government assurance, which will be monitored during loan implementation, the residual financial risk with respect to the capacity to finance operation and

maintenance appears moderate. Table 1 shows the financial projections of YHAB revenues and expenditures under the second scenario.

6. These financial projections confirm the availability of sufficient counterpart funds and the capacity of the YPDOT to finance both investment in the project and future maintenance and operating expenses of the network as a whole, including project roads. The long-term impact of these expenditure levels on network performance is in the Road Network Sustainability Analysis.¹ Loan counterpart and loan servicing needs will amount at most to only 2.2% and 0.2% of YPDOT's fuel tax revenues, respectively. This indicates that the project presents a small financial risk with respect to (i) the availability of resources to cover the project cost, (ii) the loan service requirements, and (iii) the financial burden to the department of transport.

¹ Road Network Sustainability Analysis (accessible from the list of linked documents).

Table 1: Financial Projections, 2011–2022
(CNY million)

Item	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total Fuel Tax Revenue—Yunnan	6,200	6,572	6,966	7,384	7,827	8,297	8,795	9,323	9,882	10,475	11,103	11,769
YHAB Source of Funds												
1 Fuel tax (YHAB share)	1,700	1,802	2,090	2,215	2,348	2,672	3,166	3,356	3,459	3,562	3,664	3,766
2 Tolls	20	21	22	23	24	26	27	28	30	31	33	34
3 Overloading fees	370	389	408	428	450	472	496	521	547	574	603	633
4 Other revenues	107	109	111	114	116	118	120	123	125	128	130	133
5 ADB loan: Yunnan Integrated Road Network Development Project ^a	-	42	42	42	-	-	-	-	-	-	-	-
6 ADB loan: Yunnan Sustainable Road Maintenance (Sector) Project	-	-	2.7	90.2	173.5	146.6	80.3	14.0	-	-	-	-
Total	2,197	2,363	2,799	2,948	3,064	3,414	3,809	4,042	4,161	4,295	4,430	4,566
YHAB Expenditures												
1 Pensions	715	765	819	876	937	1,003	1,073	1,127	1,183	1,242	1,304	1,369
2 Management costs	150	156	162	169	175	182	190	197	205	213	222	231
3 Salaries and bonuses	766	804	845	887	931	978	1,027	1,078	1,132	1,188	1,248	1,310
4 Minor maintenance	371	390	409	429	451	474	497	522	548	576	604	635
5 Emergency maintenance	50	51	51	52	52	53	53	54	54	55	55	56
6 Medium/major maintenance	145	197	513	533	515	720	1,064	1,058	1,022	1,004	980	949
<i>Including Yunnan Integrated Road Network Development Project^a</i>	-	187	369	73	-	-	-	-	-	-	-	-
<i>Including Yunnan Sustainable Road Maintenance (Sector) Project^b</i>	-	10	144	327	325	122	23	-	-	-	-	-
7 IDC and debt service (ADB loans) ^a	-	-	1	2	3	4	5	6	17	17	17	16
Total	2,197	2,363	2,799	2,948	3,064	3,414	3,809	4,042	4,161	4,295	4,430	4,566

ADB = Asian Development Bank, IDC = interest during construction, YHAB = Yunnan Highway Administration Bureau.

^a Based on the assumption that the YHAB only bears the financial costs related to the share of the Yunnan Integrated Road Network Development Project loan that it receives (\$20 million).

^b A delay between the expenditures under the project and the loan disbursements is counted as source of funds to the YHAB.

Source: ADB estimates.