

2016 Trails Maintenance and Operating Costs

Motorized Trails

Maintenance for motorized trails comes from vehicle registration fees and a portion of the federal Recreation Trails Program (RTP) funds. The OHV and Snowmobile registration funds provide the largest amount of these funds, currently averaging around \$4.5 million per year for OHV's and about \$900 thousand for Snowmobiles.

Current Motorized and Snowmobile Trail Miles and O&M Costs		
Estimated Trail Maintenance and O&M Costs for Motorized Trails	Estimated Trail Miles	Current Annual O&M
Motorized Trails	7,144	\$4,500,000 ¹
US Forest Service	4,840	
Bureau of Land Management	2,304	
Other Federal Agencies		
State Parks		
Snowmobile	3,000	\$900,000 ²

Table D.2

These are dedicated funds, meaning that OHV registration fees go to OHV related projects and Snowmobile registration fees are used for snowmobile related projects. All but a small percentage used to administer the programs goes to OHV and Snowmobile grants disbursed to user groups such as snowmobile and four wheel-drive clubs. Additionally, the amounts

remain largely consistent year to year.

Still, OHV and Snowmobile funds typically are not sufficient to address all program needs each year. For example, Snowmobile funds for trail grooming generally cover grooming for part of the winter snowmobile season. In heavier snow years (roughly October to March/April), grooming funds typically run out late in the season, often leaving the snowmobile clubs with no fund to cover needed grooming and other maintenance until the next round of money is available the next season.

¹ CPW. Total "Good Management" trail crews and other grants.

² Average Snowmobile Grooming Total.

Trails designated for motorized use, and motorized trails are predominantly on federal lands with large contiguous areas, do face maintenance challenges. The availability of a dedicated funding source through vehicle registration fees, enables the Trails Program to work collaboratively with both federal managers and motorized user groups to address those challenges.

Over time, as the need for OHV and Snowmobile grants exceeds the available funding, the respective user community determines their willingness to increase registration fees through legislative action. If a majority of that particular motorized community supports increased registration fees, CPW will work with the community on the needed legislation. This exemplifies the fact that these registration fees are the result of what these recreationists support, and not what the agency thinks they should have. By working closely with the Snowmobile and OHV enthusiasts, the Trails Program aims to achieve a balance between registration fee charges (and hence, revenue collected) and maintenance grant needs.

Maintenance work on motorized trails actually benefits all trail users as almost all motorized trails are actually “full access” trails were non-motorized and motorized occur. This is true in the winter as well as groomed snowmobile trails are popular with snowshoers, cross-country skiers, and other winter recreationists. Quality trail maintenance is everyone’s concern, especially as poorly maintained trails contribute to erosion and other environmental issues.

Non-Motorized Trails

The State Trails Program’s current annual funding for non-motorized trails averages between \$2 to \$3 million annually. This includes federal, state and Great Outdoors Colorado (GOCO) funds. Currently, GOCO has committed \$10 million per year for the next 3 years (between \$3 and \$3.5 million annually) to advance their “Connect”³ initiative principally for the construction of new trail segments.

Importantly, non-motorized trail recreation benefits from motorized trail expenditures. With a few exceptions, motorized and snowmobile trails are open for use by non-motorized trail recreationists. For example, cross-country skiers use trails groomed with snowmobile funds, and mountain bikers may use trails maintained with OHV funds.

Volunteers are a major contributor to trail maintenance in Colorado. In fact, volunteers contribute a substantial portion of the trail work completed annually. This is especially significant since volunteer activities get people outdoors, enhance support for protection of natural resources and other benefits. Agencies regularly report their volunteer contributions; however, more could be done to advertise this.

³ Great Outdoors Colorado. 2015. “Great Outdoors Colorado 2015 Annual Plan”.

Non-motorized trail maintenance does not have the dedicated funding that motorized trails have in Colorado. The funding, as noted elsewhere, is a combination of GOCO and mainly federal funds such as Land and Water Conservation Fund (LWCF) and RTP. GOCO funding is a vital resource for trail programs across Colorado; however, it does not fully address new construction, the maintenance backlog and O&M costs. The federal funds are subject to Congressional allocations. Over the past several decades, these funds have gone up or down due with the national political climate. Efforts to stabilize these funds, although generally supported by Colorado delegations, have not been successful. At this writing there is another effort to stabilize LWCF funding for all the states, with no clear indication if that will be successful.

Trail Maintenance Backlog

Understanding how to address the trail maintenance backlog and trail construction requires understanding of the costs involved in maintenance. Colorado’s trails have an unmet maintenance backlog of almost \$56,000,000 (2016 estimate). This would bring all designated⁷ trails up to acceptable agency standards. Additionally, there is an estimated unfunded \$21.1 million O&M need. About two thirds of that total is for trails on federal lands and the rest on state or municipal/regional managed trails. This estimate is the most speculative as much of the O&M trail work is absorbed through annual agency budgets.

Estimated Trail Maintenance Backlog (currently unfunded trail maintenance)		
Management Agency	Estimated Trail Maintenance Backlog	Estimated Unfunded O&M
Municipal/Regional⁴	\$22,251,500	\$1,500,000
Local Governments		
County/Regional		
State Agencies		
CPW – State Parks	\$6,000,000	\$1,100,000
CPW – State Wildlife Areas	N/A	
Colo. Dept. of Transportation	N/A	
Federal Agencies		
US Forest Service ⁵	\$21,080,000	\$14,097,000
Bureau of Land Management	N/A	
Other Federal Agencies	N/A	
Rocky Mountain NP		
Estimated Backlog	\$6,600,000	\$4,410,000
TOTALS:	\$55,931,500	\$21,107,000⁶

Table D.3

⁴ CPW. “2013 SCORP Local Government Survey – Summary Report”. Page 9.

⁵ GAO. 2013. *Forest Service Trails: Long- and Short-Term Improvements Could Reduce Maintenance Backlog and Enhance System Sustainability*. GAO-13-618.

⁶ These Operations and Maintenance or O&M estimates should be treated with caution as these are derived from a small number of responses.

⁷ The term “designated trails” signifies those trails that the managing agency has designated for regular maintenance and as part of that agency’s official trail system.

The Municipal/Regional agency maintenance backlog is from the 2013 SCORP Local Government Survey. Several municipal and regional agencies indicated that they typically cover most annual O&M costs for trail maintenance from their annual budgets, although there is always some unfunded backlog at all levels.

The US Forest Service maintenance backlog information comes from the 2013 General Accounting Office (GAO) report on USFS trails². This and the unfunded Operations and Maintenance (O&M) estimate are derived from national totals. The \$6.6 million backlog and \$4.4 million unfunded O&M totals shown for other federal agencies are estimates of the reported proportion of federal agency trails those agencies manage in Colorado.

There is some anecdotal evidence that as larger municipalities and regional agencies can adequately address maintenance issues under their management, especially using dedicated funding along with GOCO and Lottery funds. That situation generally does not extend to smaller cities and towns who usually have much more limited fiscal resources. Certain GOCO and Lottery continue to be vitally important to all sizes of local and regional recreation agencies; however, those funds are already fully dedicated and likely cannot address maintenance backlogs beyond current levels. The significant trails maintenance backlog is likely to continue unless new funding streams are available.

Estimated Construction Costs, 2016 Cost Estimates

Forecasting construction costs out a decade or more is fraught with concerns and uncertainty. Costs vary from location to location, from trail to trail, and depend on many factors, such as trail surface, terrain, aspect, geology, etc. Not only do costs change, perhaps dramatically, Colorado's unique landscapes create significant variations between one project and another started. Current (6/2016) estimates appear below, and provided with the caveat that actual costs can vary significantly between places and over time.

The important consideration is that building new trails varies considerably as to type of trail surface, type of expected use, location, topography, and other factors. All of those characteristics influence expected costs.

Ultimately, costs and the availability of funding will determine how many of trail miles built. The challenge is to build the right trails in the right places where people need them, while protecting wildlife, scenic and other environmental concerns, advancing long-term stewardship, along with other priorities. In short, much depends upon the sponsoring agencies and organizations to appropriately achieve what is needed by the citizens of Colorado.

The table below shows estimated trail construction costs. These are based on recent (6/2016) grants and input from trail managers.

Estimated Trail Construction Costs	General trail construction characteristics	Estimated Per Mile Costs
Natural surface/Natural tread trail – 18” – 60” trail tread	Trail designed consistent with agency specific trail standards, acceptable grade, erosion mitigation, etc.	\$25,000 \$40,000
Crusher Fines	Trail designed consistent with agency specific trail standards as above.	\$500,000 - \$600,000
Concrete Trail	10 foot wide, 6-inch thick, reinforced, mesh, sufficient gravel base subgrade.	\$1,000,000
Canyon trail with significant elevation change, aspect and geological issues	Example from Jefferson County “Peaks to Plains” Trail	\$5,000,000

Table D.4

Construction costs for new trails are substantial. Of course, appropriate construction includes a mix of added benefits, such as environmental protections and quality experiences for trail users. Trail provider agencies each have specific standards for this work. Additionally, specific requirements are included in the trails grant process, including

follow up reviews of those projects funded by trail grants to ensure that all appropriate construction, environmental and other standards are fulfilled.

Conclusions

- The trail maintenance backlog for municipal and regional trail providers is manageable at present (2016), however, there are locations that face serious challenges, mainly financial, to keep up with those maintenance needs. As population increases and as some locations look to encourage trail related activities for residents and visitors to their area, the challenge of providing quality trails will likely increase.
- Trail maintenance on federal lands is more serious. Federal agencies, specifically the US Forest Service and BLM, face significant and at times highly problematic financial constraints. Perhaps the top complain heard from citizens during the public process for the Statewide Trails Strategic Plan was concerns over trail maintenance on federal lands. There simply is not enough money available from

current sources to assist the federal agencies in meeting their trail challenges. The recent GAO report, cited above, highlights this on a national level. For Colorado, the problem is that trail conditions on federal lands affects recreation for Colorado's citizens and visitors to Colorado. It is a problem that goes beyond who manages the lands and trails in question.