

# National Forests of the Pacific Northwest Region

Supplemental figures of selected data  
by forest and state



Part of year three of

*The Forest Service and Communities:*

*The Relationships Between Land and People in the Pacific Northwest Region*

Spring 2019



## University of Oregon Ecosystem Workforce Program (EWP) Team:

The Ecosystem Workforce Program is a bi-institutional program of University of Oregon's Institute for a Sustainable Environment and the College of Forestry at Oregon State University.

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### Project lead

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### Forest Service year 3 creative team

Members of the creative team committed time and energy to advising, reviewing, and challenging the project to advance understanding of the Forest Service's impacts on sustainable, natural resources-based economies.

**Aly Warren**, Pacific Northwest Region, Natural Resources

**Ryan Bansbach**, Pacific Northwest Region, Budget and Financial Management

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**Karl Dalla Rosa**, Pacific Northwest Region, State and Private Forestry

**Kathryn Strawn**, Pacific Northwest Region, Data Resource Management

## About this project

This is a joint project between the US Forest Service Pacific Northwest Region and the University of Oregon, Ecosystem Workforce Program. This project aims to help the Forest Service and its partners better understand and communicate the social and economic contexts in which the Forest Service operates and document Forest Service impacts in advancing sustainable natural resources-based economies. We designed this project as a collaborative learning process in which we would experiment with new ways to use, integrate, and represent data, with a focus on application of Forest Service data.

## Acknowledgments

The support of the Regional Forester and the Regional Office Director Teams for this project has been instrumental to our ability to fulfill the project objectives, especially our learning process. We appreciate their leadership and willingness to try something new, to allow for learning, and to support many of their staff in continuing to coordinate with us in the third and final year of this project.

We greatly appreciate the work of Emily Jane Davis, EWP Associate Director and Oregon State University EWP lead, and Cassandra Moseley, EWP Director and this project's principal investigator, for their work in the initial stages of this project as well as their continued engagement.

We also appreciate the contributions and data support that the following individuals provided:

**Heather Zissler**, **Nick Goldstein**, and **Brenna White**, Pacific Northwest Region Office of Communications and Community Engagement; **Dana Croll** and **Josh Chapman**, Pacific Northwest Region, Natural Resources; **Amy Thomas**, **Aaron Eklund** and **Amanda Warner Thorpe**, Pacific Northwest Region, Engineering.

Cover photo courtesy of Emily Jane Davis. All other photos courtesy of US Forest Service Pacific Northwest Region (<https://www.flickr.com/photos/forestservicenw/>). This document is one of three products created for this third year of the project, which are collectively classified as EWP Working Paper #95; all may be downloaded at: <http://ewp.uoregon.edu/publications/working>, or at the project page at: <http://ewp.uoregon.edu/USFScommunities>.

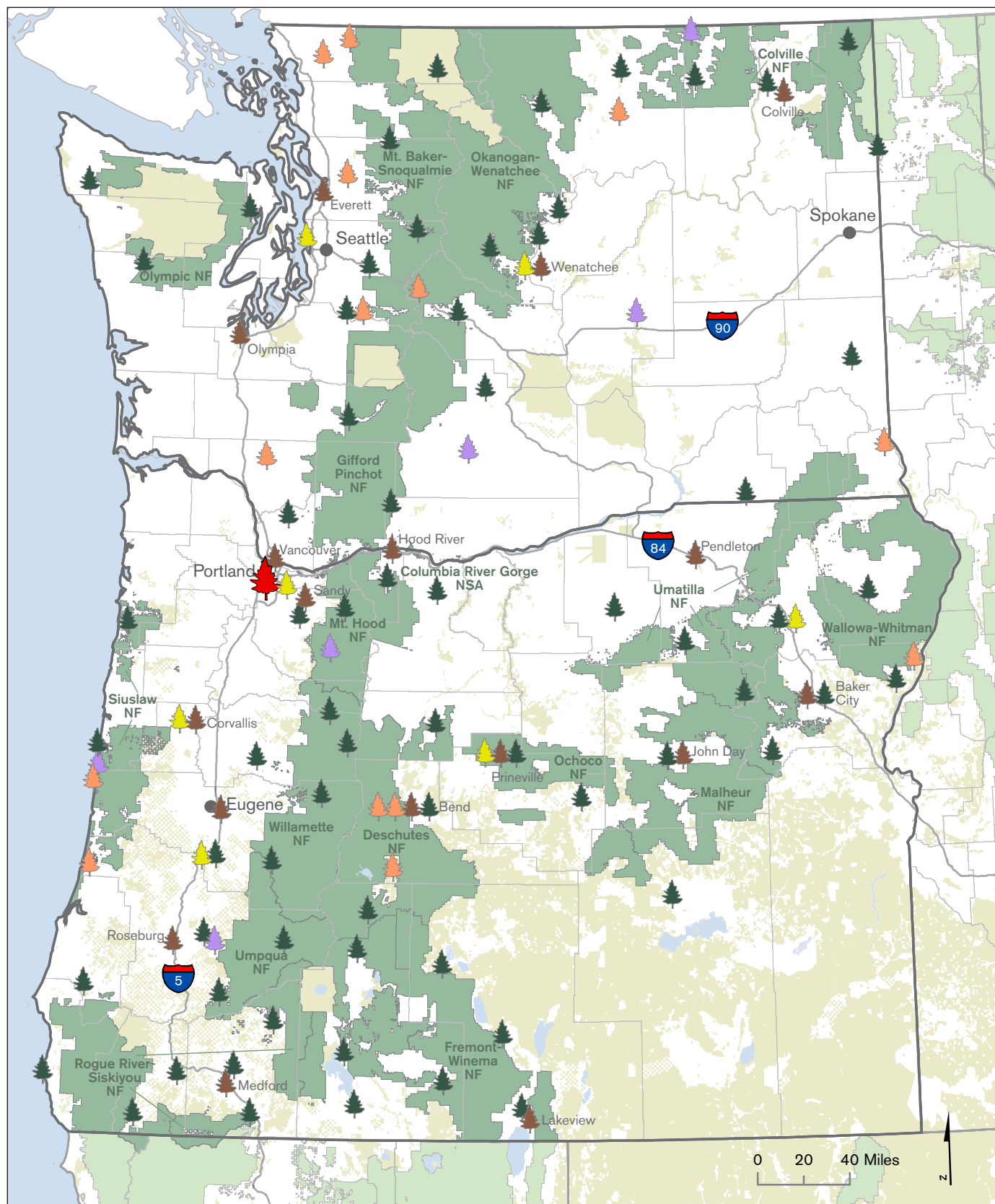
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# US Forest Service office locations



Created April 2019 | Ecosystem Workforce Program, University of Oregon

## US Forest Service Offices

-  Job Corps Center
-  Research Station
-  Ranger District
-  Supervisor's Office (town location names on map)
-  Regional Office
-  Visitor Center

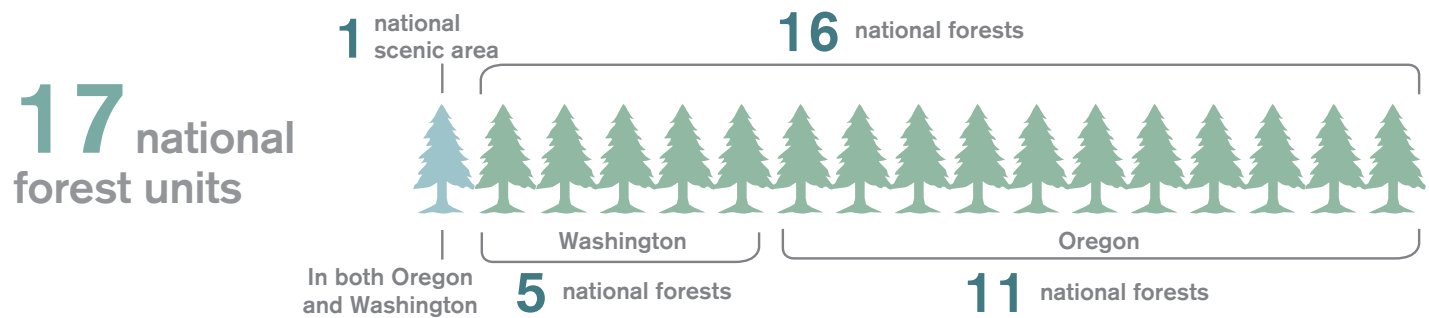
-  US Forest Service lands, Pacific Northwest Region
-  US Forest Service lands, other regions
-  BLM and other federal lands
-  Interstates

**There are 116 Forest Service offices in 96 towns in Oregon and Washington.**



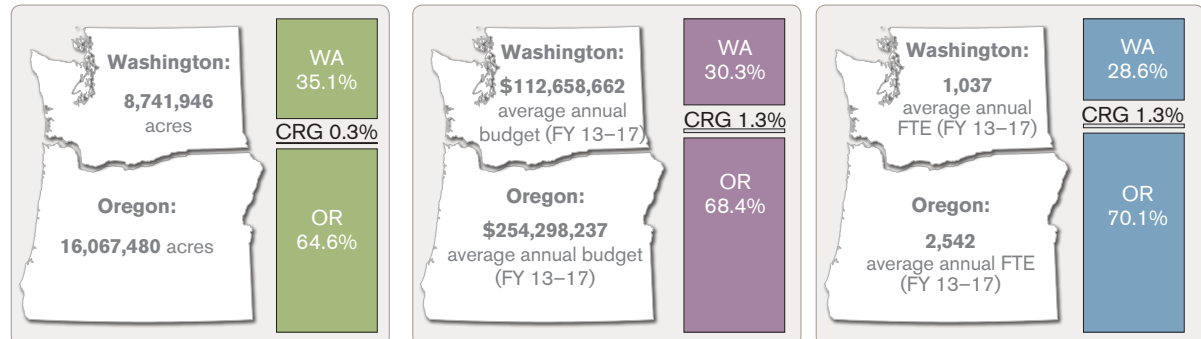
# National forest units in the Pacific Northwest Region

This document includes overview figures created throughout the three years of the Forest Service and Communities project. The intent is to illustrate selected data collected by the Forest Service for a variety of measures at both the regional level and for each national forest unit in the region. These figures do not represent the full breadth and depth of data collected by the Forest Service, but serve as examples of how data can be displayed. On this first spread we present basic context data—the total area, average budget, and average personnel during recent years for each national forest unit. These basic overview data are included on each of the following pages to provide context for unit-level accomplishments.



REGION TOTALS	Area	Annual budget (FY 13–17 average)	Annual personnel (FY 13–17 average)
	24,892,672 acres	\$371,829,821	3,626 FTE

## By state:<sup>1</sup>



<sup>1</sup> For state breakdowns throughout this book, the Umatilla National Forest is counted as an Oregon national forest. The Columbia River Gorge, spanning both Washington and Oregon, is presented separately throughout.

National forest unit	Area (Total x1,000 acres)		Budget FY 2013–2017 average (\$ million)	Personnel FY 2013–2017 average (Total FTE)
	Inventoried roadless	Wilderness Other		
 <b>Colville</b>		955	18.5	172
 <b>Deschutes</b>		1,612	36.6	379
 <b>Fremont-Winema</b>		2,254	27.1	263
 <b>Gifford Pinchot</b>		1,312	21.8	167
 <b>Malheur</b>		1,481	24.9	266
 <b>Mt. Baker-Snoqualmie</b>		2,563	17.9	168
 <b>Mt. Hood</b>		1,069	18.0	167
 <b>Ochoco</b>		967	12.0	133
 <b>Okanogan-Wenatchee</b>		3,280	41.6	458
 <b>Olympic</b>		632	12.9	71
 <b>Rogue River-Siskiyou</b>		1,719	24.8	255
 <b>Siuslaw</b>		630	16.4	130
 <b>Umatilla</b>		1,406	19.1	195
 <b>Umpqua</b>		986	20.2	203
 <b>Wallowa-Whitman</b>		2,261	26.9	263
 <b>Willamette</b>		1,682	28.3	287
 <b>Columbia River Gorge</b>		83	4.9	47



## Timber sales and visitor estimates in national forests

As shown, the sizes, locations, budgets, and personnel of national forest units in the region vary considerably. They span jurisdictions, ecosystems, urban and rural areas, and a variety of social and demographic conditions. As such, it is clear that forests will also vary in their priorities as well as how and where they are conducting forest restoration and impacting communities. On this spread we show data for the volume of timber sold and the estimated number of annual visitors at the regional, state, and national forest unit levels.

### REGION TOTALS

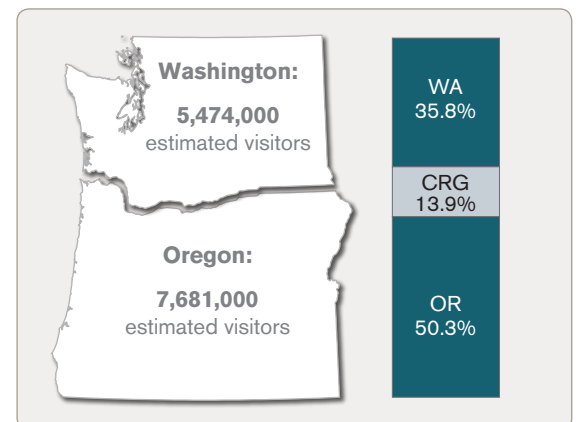
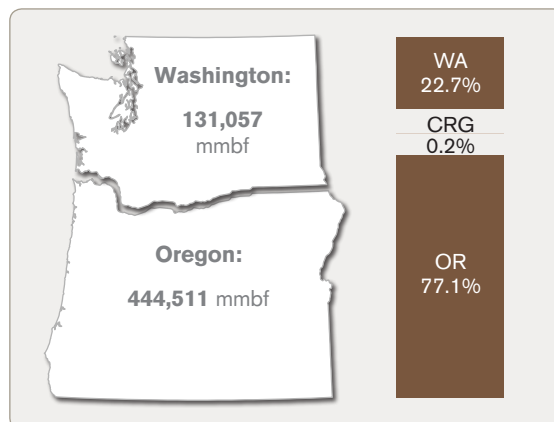
Annual timber sold  
(FY 13–17 average)























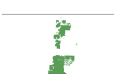











**576,639 mmbf**

Annual visitors  
(FY 12–16 estimates)

**15,272,000**

### By state:



National forest unit	Area (Total x1,000 acres)		Budget FY 2013–17 avg. (\$ million)	Personnel FY 2013–17 avg. (Total FTE)	Timber FY 2013–2017 average volume sold (x1,000 mmbf)	Visitors FY 2012–2016 estimates (x1,000)
	Inventoried roadless	Wilderness Other				
 Colville		955	18.5	172	41.2	156
 Deschutes		1,612	36.6	379	45.0	1,376
 Fremont-Winema		2,254	27.1	263	44.6	195
 Gifford Pinchot		1,312	21.8	167	32.1	1,169
 Malheur		1,481	24.9	266	37.0	160
 Mt. Baker-Snoqualmie		2,563	17.9	168	7.9	2,185
 Mt. Hood		1,069	18.0	167	33.8	2,306
 Ochoco		967	12.0	133	10.7	172
 Okanogan-Wenatchee		3,280	41.6	458	31.1	1,338
 Olympic		632	12.9	71	18.7	626
 Rogue River-Siskiyou		1,719	24.8	255	53.8	597
 Siuslaw		630	16.4	130	42.3	1,017
 Umatilla		1,406	19.1	195	18.2	168
 Umpqua		986	20.2	203	41.8	506
 Wallowa-Whitman		2,261	26.9	263	20.9	246
 Willamette		1,682	28.3	287	96.3	938
 Columbia River Gorge		83	4.9	47	1.1	2,117

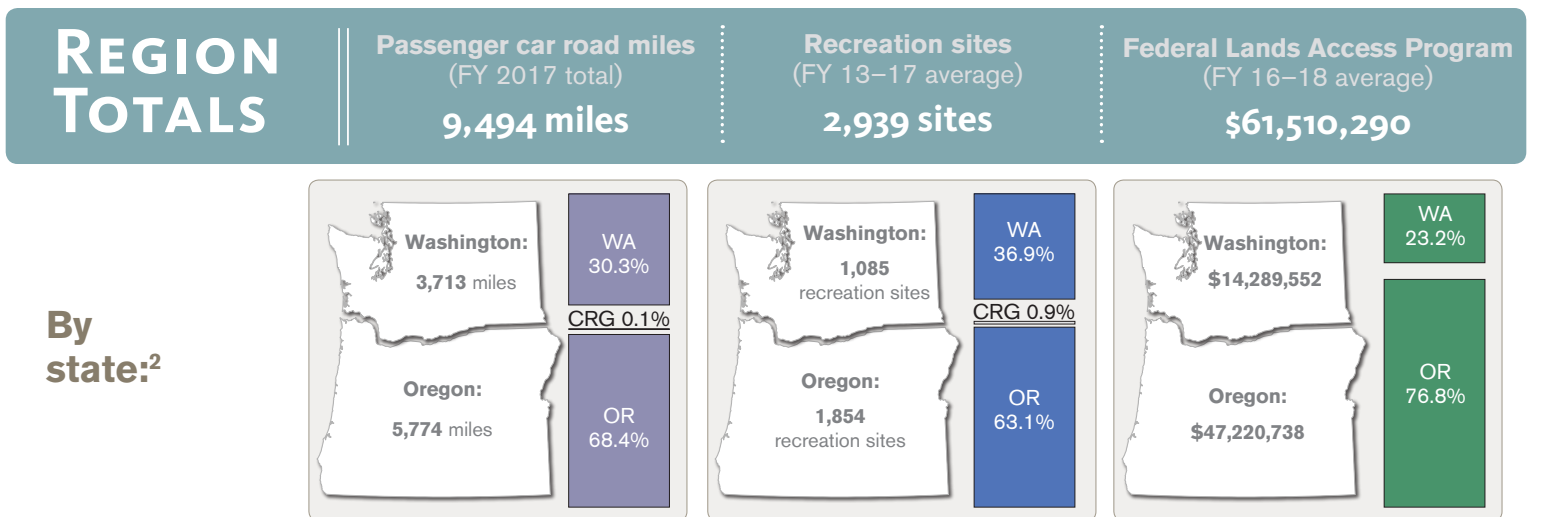


## Roads and recreation sites in national forests

The Forest Service works to both maintain and improve infrastructure to meet the needs of employees, visitors, and other users of national forest units. The Pacific Northwest Region maintained 9,494 miles of passenger car roads during FY 2017. On average, 2,620 of these miles were improved annually from FY 2013–2017. These improvements resulted from both Forest Service (66%) and partner (34%) efforts. Roads provide benefits to national forest users for sightseeing, hiking, fishing, hunting, gathering of forest products, and many other activities. Here we highlight just one of these connections between national forestland roads and visitors, which is through access to recreation sites. Recreation sites range in development from relatively undeveloped areas, with little to no improvements, to concentrations of facilities and services, evidencing a range of amenities and investment.<sup>1</sup>

### The Federal Lands Access Program





















































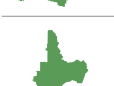















Access to federal lands is essential to many user groups in the Pacific Northwest. The Federal Lands Access Program (FLAP) was established by the Federal Highway Administration to improve access to or within federal and tribal lands. The program is combined with matching funds from county and state agencies as well as national forest units to improve public roads, transit, and related systems, especially for high-use recreation sites or areas of economic importance. Both Oregon and Washington are among the top eight states receiving funding through FLAP based on road miles, visitation, public bridges, and federal land area. Between FY 2016–2018, FLAP funded 61 projects totaling \$184.5 million, including \$31 million in matching funds from 22 different city, county, and state agencies as well as national forest units.



<sup>1</sup> According to the National Visitor Use Monitoring Program, "A recreation site is a discrete area on a forest that provides recreation opportunities, receives recreational use, and requires a management investment to operate and/or maintain to standard under the direction of an administrative unit in the National Forest System. Recreation sites range in development from relatively undeveloped areas, with little to no improvements, to concentrations of facilities and services evidencing a range of amenities and investment."

<sup>2</sup> FLAP funding is broken down by state versus national forest unit. For this reason, the CRG portion cannot be determined and is not presented separately.



National forest unit	Area (Total x1,000 acres)		Budget FY 2013-17 avg. (\$ million)	Personnel FY 2013-17 avg. (Total FTE)	Open passenger car road miles (2017) and annual miles improved or maintained (FY 13-17 avg.)		Recreation sites FY 2016-2018 avg.
	Inventoried roadless	Wilderness Other			Total open PC miles (2017)	Avg. miles improved (partners) Avg. miles improved (USFS)	
 <b>Colville</b>	 955		18.5	172	 Total 2017 PC road miles: 352	 125	
 <b>Deschutes</b>	 1,612		36.6	379	 438	 272	
 <b>Fremont- Winema</b>	 2,254		27.1	263	 1009	 98	
 <b>Gifford Pinchot</b>	 1,312		21.8	167	 399	 218	
 <b>Malheur</b>	 1,481		24.9	266	 361	 65	
 <b>Mt. Baker- Snoqualmie</b>	 2,563		17.9	168	 1014	 230	
 <b>Mt. Hood</b>	 1,069		18.0	167	 365	 175	
 <b>Ochoco</b>	 967		12.0	133	 220	 82	
 <b>Okanogan- Wenatchee</b>	 3,280		41.6	458	 1544	 402	
 <b>Olympic</b>	 632		12.9	71	 404	 109	
 <b>Rogue River- Siskiyou</b>	 1,719		24.8	255	 1033	 305	
 <b>Siuslaw</b>	 630		16.4	130	 217	 92	
 <b>Umatilla</b>	 1,406		19.1	195	 495	 128	
 <b>Umpqua</b>	 986		20.2	203	 538	 156	
 <b>Wallowa- Whitman</b>	 2,261		26.9	263	 396	 207	
 <b>Willamette</b>	 1,682		28.3	287	 702	 249	
 <b>Columbia River Gorge</b>	 83		4.9	47	 7	 26	

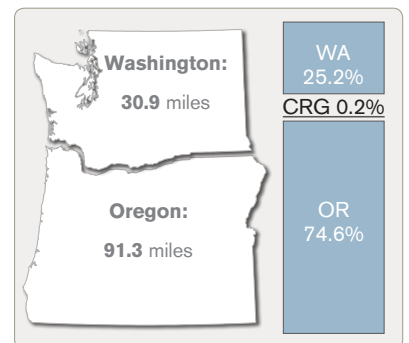
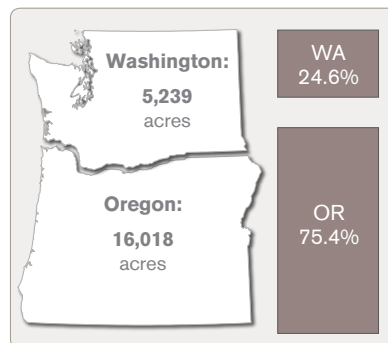
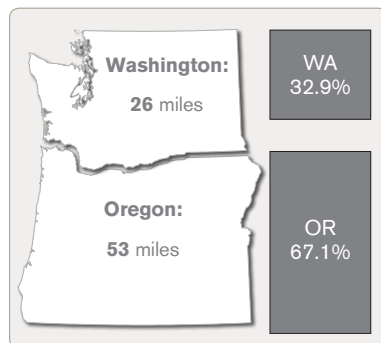














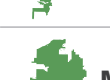





















## Restoration through road decommissioning in national forests

The Forest Service accomplishes restoration goals through many activities, one of which is forest road decommissioning, which enhances watershed conditions. Road decommissioning is defined as, “Activities that result in the stabilization and restoration of unneeded roads to a more natural state” (36 CFR 212.1, FSM 7705– Transportation System),” and includes a range of activities. In some instances, road decommissioning results in terrestrial habitat restoration. By connecting sections of habitat that were previously divided by a road, the ability of animals to move across the land is improved. Road decommissioning can also result in improved stream habitat, reported in stream miles. Between FY 2016–2018, 237 miles of road were decommissioned across the region, resulting in the restoration of 63,770 acres of terrestrial habitat and 367 stream miles. Other restoration activities are often performed along with road decommissioning. For example, between FY 2016–2018, 39 stream crossings were also improved for aquatic organism passage which helps restore stream connectivity, an important feature of salmon restoration. It is important to note that, just like other measures, road decommissioning efforts and impacts can vary significantly between units based on a variety of factors (e.g., species present, restoration goals, or the amount of unnecessary road miles in a forest, among other considerations).



**By state:**



National forest unit	Area (Total x1,000 acres)			Budget FY 2013–17 avg. (\$ million)	Personnel FY 2013–17 avg. (Total FTE)	Roads decommissioned FY 2016–2018 avg. (avg. miles /year)		Habitat restored via road decommissioning FY 2016–2018 avg.		
	Inventoried roadless	Wilderness	Other			Systems roads	Non-systems roads	(terrestrial acres)	(stream miles)	Forest Service
 Colville	 955	18.5	172	Total avg. roads decommissioned: 6.9 miles		Total avg. acres: 1,295			5.5	
 Deschutes	 1,612	36.6	379	3.2	6,189		22.6			
 Fremont-Winema	 2,254	27.1	263	5.1	0		6.6			
 Gifford Pinchot	 1,312	21.8	167	2.7	174		3.3			
 Malheur	 1,481	24.9	266	3.3	5,786		3.6			
 Mt. Baker-Snoqualmie	 2,563	17.9	168	4.6	502		7			
 Mt. Hood	 1,069	18.0	167	1.6	555		10.5			
 Ochoco	 967	12.0	133	N/A	0		0			
 Okanogan-Wenatchee	 3,280	41.6	458	4.2	1,097		11.7			
 Olympic	 632	12.9	71	7.6	2,171		3.4			
 Rogue River-Siskiyou	 1,719	24.8	255	4.9	8		0			
 Siuslaw	 630	16.4	130	4.2	0		2.7			
 Umatilla	 1,406	19.1	195	0.3	0		0.5			
 Umpqua	 986	20.2	203	4.2	2,877		2.6			
 Walla-Whitman	 2,261	26.9	263	22.8	2		12.8			
 Willamette	 1,682	28.3	287	3.3	601		29.4			
 Columbia River Gorge	 83	4.9	47	N/A	0		0.2			



## Maintaining national forest trails with partners

The Forest Service relies on partners to help sustain the nation’s forests and grasslands, including recreation maintenance and accessibility needs. The Pacific Northwest Region contains 24,561 miles of trail across national forestlands, which many Forest Service partners use and value. In FY 2013–2017, an average of 4,357 miles of trails each year were either maintained or improved, 59% of which was completed by partners. One particular group of partners—private citizens giving their time as volunteers to support work on national forestlands—are a critical workforce component of the Pacific Northwest’s trail work portfolio. Between FY 2014–2015, over 137,000 hours of volunteer time were used to construct or maintain trails on national forest lands in the Pacific Northwest Region. Both individuals and the Forest Service benefit from this relationship where community members learn about conservation and give back to the community, while also leveraging and expanding the workforce capacity of the Region’s recreation staff.

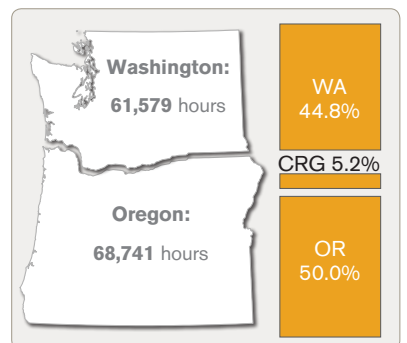
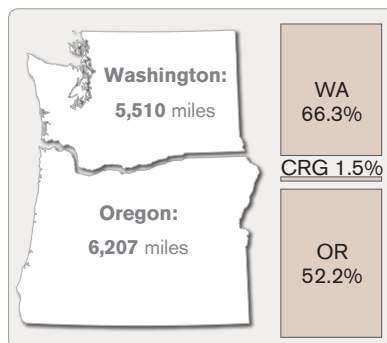
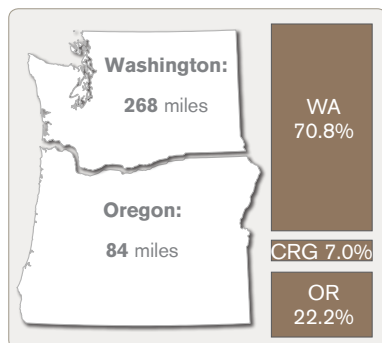
### REGION TOTALS





































































Annual total trail miles improved  
(FY 13–17 average)  
**379 miles**

Annual total trail miles maintained  
(FY 13–17 average)  
**11,893 miles**

Annual volunteer hours for trail construction/mgmt.  
(FY14–15 average)  
**137,454 hours**

### By state:



National Forest	Area (Total x1,000 acres)			Budget FY 2013-17 avg. (\$ million)	Personnel FY 2013-17 avg. (Total FTE)	Total trail miles and annual miles improved or maintained (FY 13-17 avg.)		Annual volunteer hours for trail construction or maintenance (FY 14-15 avg.)
	Inventoried roadless	Wilderness	Other			Avg. miles improved	Total avg. improved or maintained trail miles	
 Colville	 955			18.5	172	 513	Total average trail miles maintained and improved: 513	 2,202
 Deschutes	 1,612			36.6	379	 2,222		 28,250
 Fremont-Winema	 2,254			27.1	263	 313		 4,990
 Gifford Pinchot	 1,312			21.8	167	 868		 10,121
 Malheur	 1,481			24.9	266	 155		 960
 Mt. Baker-Snoqualmie	 2,563			17.9	168	 932		 24,889
 Mt. Hood	 1,069			18.0	167	 457		 7,706
 Ochoco	 967			12.0	133	 113		 2,212
 Okanogan-Wenatchee	 3,280			41.6	458	 3,292		 11,321
 Olympic	 632			12.9	71	 173		 13,046
 Rogue River-Siskiyou	 1,719			24.8	255	 298		 7,722
 Siuslaw	 630			16.4	130	 169		 1,576
 Umatilla	 1,406			19.1	195	 565		 437
 Umpqua	 986			20.2	203	 424		 3,843
 Wallowa-Whitman	 2,261			26.9	263	 888		 1,790
 Willamette	 1,682			28.3	287	 686		 9,256
 Columbia River Gorge	 83			4.9	47	 203		 7,134

# Data sources and methods

Data	Page	Sources and methods
<b>Overview data</b>		
Area	2–3	<p>We presented total wilderness acres and total inventoried roadless acres as portions of the total acres for each national forest unit in R6.</p> <p>Total acres per unit and wilderness acres per unit data provided in the USDA Forest Service Land Area Report, downloaded September 2016.</p> <p>Inventoried Roadless acres per unit data provided by USDA Forest Service (contact: Amanda Warner Thorpe, Acting Transportation Program Manager, Alaska &amp; Pacific Northwest Regions) in October 2016.</p>
Budget	2–3	We averaged the annual budget for R6 national forest units from FY 13–17. Annual budget data provided by USDA Forest Service, R6, Communications and Community Engagement (contact: Emily Biesecker) in Fall 2018.
Personnel	2–3	We averaged the annual full-time equivalent (FTE) for R6 national forest units from FY 13–17. Annual FTE data provided by USDA Forest Service, R6, Communications and Community Engagement (contact: Emily Biesecker) in Fall 2018.
<b>Timber and visitors</b>		
Timber	4–5	We averaged the annual timber volume sold (mmbf) for R6 national forest units from FY 13–17. Annual timber volume sold data came from fourth-quarter <i>Forest Service Cut and Sold</i> reports (available at: <a href="https://www.fs.fed.us/forestmanagement/products/cut-sold/index.shtml">https://www.fs.fed.us/forestmanagement/products/cut-sold/index.shtml</a> ).
Visitors	4–5	Visitor estimates are not averaged but sampled once between 2012–2016 for R6 Forests. We retrieved estimates from the National Visitor Use Monitoring database ( <a href="https://apps.fs.usda.gov/nvum/results">https://apps.fs.usda.gov/nvum/results</a> ) in Fall 2018. We selected the most recent year estimate and reported the “Total Estimates National Forest Estimates” as our metric.
<b>Roads and access</b>		
Federal Lands Access Program (FLAP) funding	6	We summarized FY 16–18 of FLAP funding for Washington and Oregon and then calculated a yearly average. FLAP data were provided by USDA Forest Service, R6, Engineering (contact: Aaron Eklund) in April 2019.
1. Open passenger car road miles	6–7	We presented the annual average (FY 13–17) of passenger car road miles maintained/improved as a portion of the total passenger car road miles for R6 national forest units in FY 2017.
2. Passenger car annual miles improved or maintained		<p>1. We selected “Miles of Passenger Car Open Road (levels 3–5)” as our metric because we believed this would best represent potential access for the majority of people visiting forests. We used FY 2017 because it was the most recent year for which we had data. Road miles data provided by USDA Forest Service, R6, Engineering (contact: Aaron Eklund) in April 2019.</p> <p>2. We averaged the annual passenger car road miles improved and maintained by the Forest Service and by partners for R6 national forest units from FY 13–17. Road miles improved or maintained data provided by USDA Forest Service, R6, Communications and Community Engagement (contact: Emily Biesecker) in Fall 2018.</p>
Recreation Sites	6–7	We averaged the recreation sites (total) and recreation sites (open and maintained) for R6 national forest units from FY 16–18 and presented “open and maintained” sites as a proportion of the total number of sites per unit. Recreation sites data provided by USDA Forest Service, R6, Engineering (contact: Aaron Eklund) in April 2019.
<b>Restoration through Road Decommissioning</b>		
Annual road miles decommissioned	8–9	We averaged the miles of roads decommissioned (all classes, 1–5) in R6 national forest units from FY 16–18. We presented the annual average of road miles decommissioned by system and non-system roads. Road decommissioning data provided by USDA Forest Service, R6, Engineering (contact: Aaron Eklund) in April 2019.
Habitat restored via road decommissioning:	8–9	We averaged the annual terrestrial habitat acres restored and the annual stream miles restored through road decommissioning for R6 national forest units from FY 16–18.
1. Terrestrial acres		1. We used data from non-spatial Terrestrial Habitat Enhancement program reports. We selected “Roads” from “Column Activity_T” and then selected “Decommission” (all treatment levels, 1–5) from “Activity_1 Column.” We then divided the accomplishments by Forest Service and Partner using the “BLI_Acres” field and summarized the results. Data provided by USDA Forest Service, R6, Natural Resources (contact: Josh Chapman) in late 2018.
2. Stream miles		2. We summarized the stream miles restored through road decommissioning for all treatment levels (1–5). Stream miles restored data provided by USDA Forest Service, R6, Natural Resources (contact: Hilaire Bojonell) in April 2019.

Data	Page	Sources and methods
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Maintaining trails with partners		
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Trail miles 1. Total trail miles 2. Trail miles improved or maintained— Forest Service and partners	10–11	We presented the annual average (FY 13–17) of trail miles maintained/improved by the USDA Forest Service and by partners as portions of the total trail miles for R6 national forest units.  1. We averaged the total miles of trails for R6 national forest units from FY 13–17. Trail miles data provided by USDA Forest Service, R6, Engineering (contact: Aaron Eklund) in April 2019.  2. We averaged the annual trail miles improved and maintained by the Forest Service and by partners for R6 national forest units from FY 13–17. Trail miles improved or maintained data provided by USDA Forest Service, R6, Communications and Community Engagement (contact: Emily Biesecker) in Fall 2018.
Annual volunteer hours spent on trails construction or maintenance	10–11	We averaged the annual volunteer hours tracked for trail construction or maintenance on R6 national forest units from FY 14–15. Data came from VPR: USDA Forest Service Volunteer & Partner Reports. Data received from Emily Biesecker, FS-1800-16, July 19, 2016.

